Province of British Columbia

MINISTRY OF TRANSPORTATION AND HIGHWAYS

Annual Report

FOR THE FISCAL YEAR

1981/82

Province of British Columbia

MINISTRY OF TRANSPORTATION AND HIGHWAYS

REPORT

FOR THE FISCAL YEAR

1981/82

ISSN 0706-1897

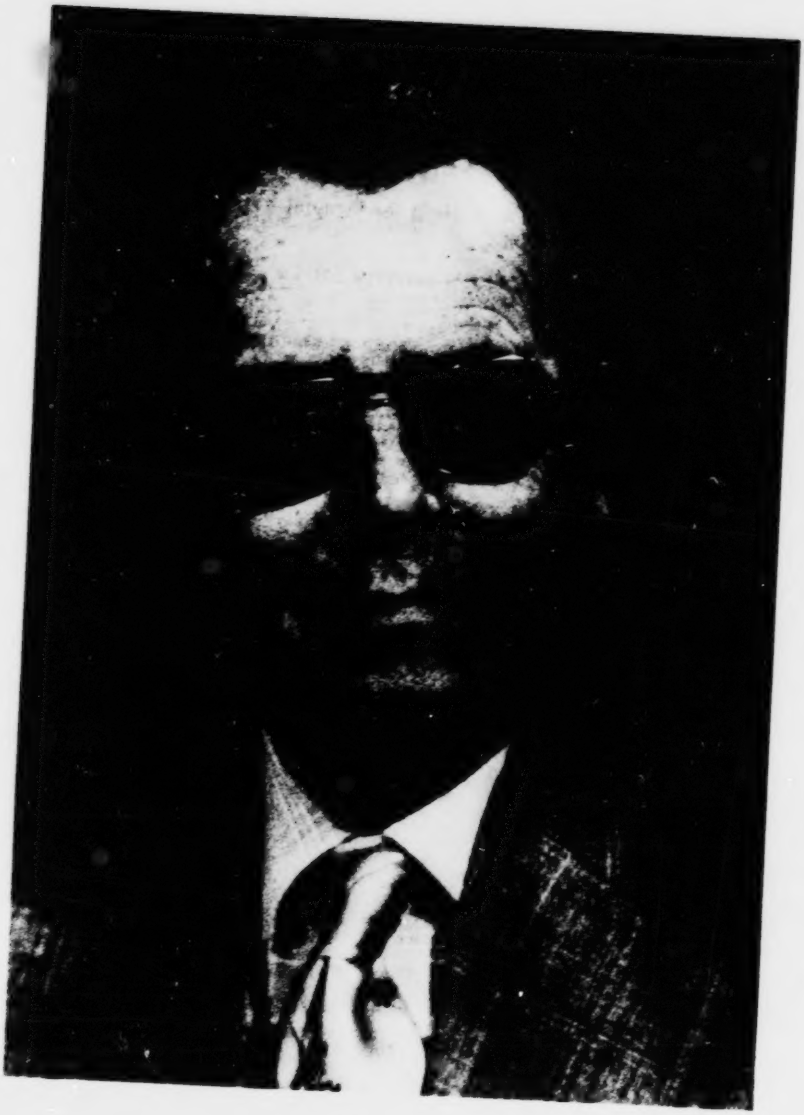
To the Honourable Henry P. Bell-Irving, D.S.O., O.B.E., E.D.,
Lieutenant Governor of the Province of British Columbia.

May it Please Your Honour:

Herewith I respectfully submit the Annual Report of the Ministry of Transportation and Highways for the fiscal year ended March 31, 1982 in compliance with the provisions of the *Ministry of Transportation and Highways Act*.

ALEX. V. FRASER
Minister of Transportation and Highways

Office of the Minister of
Transportation and Highways
Parliament Buildings, July 31, 1982



The Honourable Alex. V. Fraser,
Minister of Transportation and Highways

Victoria, B.C. July 8, 1982

The Honourable Alex. V. Fraser,
Minister of Transportation
and Highways,
Parliament Buildings,
Victoria, B.C.

Sir:

I am pleased and honoured to present the Annual Report of this Ministry for the fiscal year ended March 31st, 1982.

General comments on the year's activity follow with identification of senior officials.

The main body of the report identifies the various branches and their directors with branch reports and statistics.

Respectfully submitted,
R. G. HARVEY
Deputy Minister

R. G. HARVEY

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ADMINISTRATION

T. R. JOHNSON
HIGHWAYS

DR. D. A. KASIANCHUK
TRANSPORT POLICY

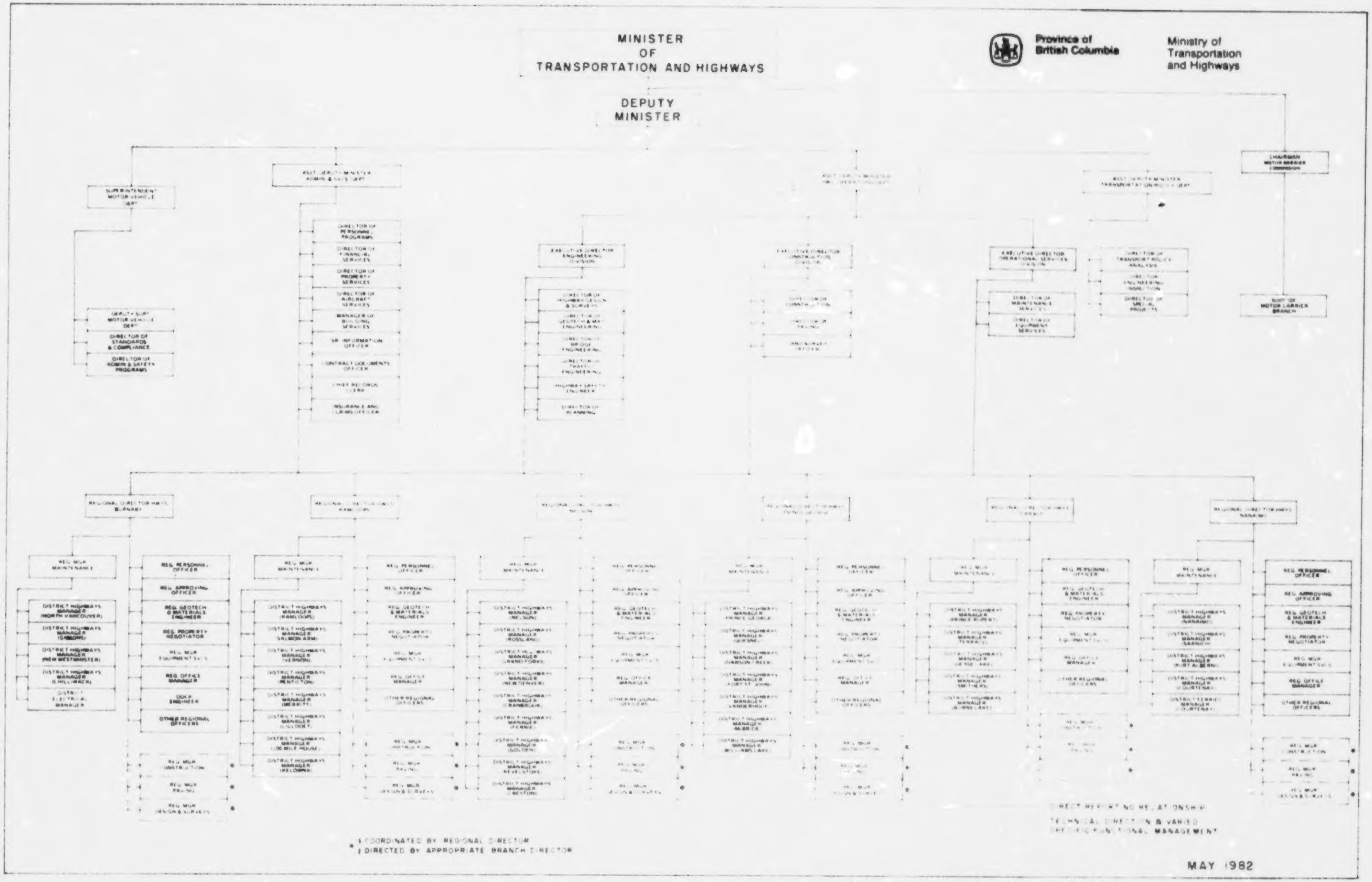
R. G. WHITLOCK
MOTOR VEHICLES

EXECUTIVE DIRECTORS

R. G. WHITE
CONSTRUCTION

P. J. CARR
OPERATIONS

M. G. ELSTON
ENGINEERING


MINISTER OF TRANSPORTATION AND HIGHWAYS
Province of British Columbia
Ministry of Transportation and Highways
DEPUTY MINISTER
SUPERINTENDENT MOTOR VEHICLE DEPT
DEPUTY SUPT MOTOR VEHICLE DEPT
DIRECTOR OF STANDARDS & COMPLIANCE
DIRECTOR OF ADMIN & SAFETY PROGRAMS
ASST DEPUTY MINISTER ADMIN & SVCS DEPT
DIRECTOR OF PERSONNEL PROGRAMS
DIRECTOR OF FINANCIAL SERVICES
DIRECTOR OF PROPERTY SERVICES
DIRECTOR OF AIRCRAFT SERVICES
MANAGER OF BUILDING SERVICES
SR INFORMATION OFFICER
CONTRACT DOCUMENTS OFFICER
CHIEF RECORDS CLERK
INSURANCE AND CLAIMS OFFICER
EXECUTIVE DIRECTOR ENGINEERING DIVISION
DIRECTOR OF HIGHWAY DESIGN & SURVEYS
DIRECTOR OF GEOTECH & MAT ENGINEERING
DIRECTOR OF BRIDGE ENGINEERING
DIRECTOR OF TRAFFIC ENGINEERING
HIGHWAY SAFETY ENGINEER
DIRECTOR OF PLANNING
EXECUTIVE DIRECTOR CONSTRUCTION DIVISION
DIRECTOR OF CONSTRUCTION
DIRECTOR OF PAVING
ASST DEPUTY MINISTER TRANSPORTATION POLICY DEPT
EXECUTIVE DIRECTOR OPERATIONAL SERVICES DIVISION
DIRECTOR OF MAINTENANCE SERVICES
DIRECTOR OF EQUIPMENT SERVICES
DIRECTOR OF TRANSPORT POLICY ANALYSIS
DIRECTOR ENGINEERING INSPECTION
DIRECTOR OF SPECIAL PROJECTS
CHAIRMAN MOTOR CARRIER COMMISSION
SUPT OF MOTOR CARRIER BRANCH
REGIONAL DIRECTOR HWYS BURNABY
REGIONAL DIRECTOR HWYS KAMLOOPS
REGIONAL DIRECTOR HWYS NELSON
REGIONAL DIRECTOR HWYS PRINCE GEORGE
REGIONAL DIRECTOR HWYS TERRACE
REGIONAL DIRECTOR HWYS NANAIMO
REG MGR MAINTENANCE
DISTRICT HIGHWAYS MANAGER (NORTH VANCOUVER)
DISTRICT HIGHWAYS MANAGER (GIBSONS)
DISTRICT HIGHWAYS MANAGER (NEW WESTMINSTER)
DISTRICT HIGHWAYS MANAGER (CHILLIWACK)
DISTRICT ELECTRICAL MANAGER
REG PERSONNEL OFFICER
REG APPROVING OFFICER
REG GEOTECH & MATERIALS ENGINEER
REG PROPERTY NEGOTIATOR
REG MGR EQUIPMENT SVCS
REG OFFICE MANAGER
DEEP ENGINEER
OTHER REGIONAL OFFICERS
REG MGR CONSTRUCTION
REG MGR PAVING
REG MGR DESIGN & SURVEYS
DISTRICT HIGHWAYS MANAGER (KAMLOOPS)
DISTRICT HIGHWAYS MANAGER (SALMON ARM)
DISTRICT HIGHWAYS MANAGER (VERNON)
DISTRICT HIGHWAYS MANAGER (PENTICTON)
DISTRICT HIGHWAYS MANAGER (MERRITT)
DISTRICT HIGHWAYS MANAGER (LILLOOET)
DISTRICT HIGHWAYS MANAGER (100 MILE HOUSE)
DISTRICT HIGHWAYS MANAGER (KELOWNA)
DISTRICT HIGHWAYS MANAGER (NELSON)
DISTRICT HIGHWAYS MANAGER (ROSSLAND)
DISTRICT HIGHWAYS MANAGER (GRAND FORKS)
DISTRICT HIGHWAYS MANAGER (NEW DENVER)
DISTRICT HIGHWAYS MANAGER (CRANBROOK)
DISTRICT HIGHWAYS MANAGER (FERNIE)
DISTRICT HIGHWAYS MANAGER (GOLDEN)
DISTRICT HIGHWAYS MANAGER (REVELSTOKE)
DISTRICT HIGHWAYS MANAGER (CRESTON)
DISTRICT HIGHWAYS MANAGER (PRINCE GEORGE)
DISTRICT HIGHWAYS MANAGER (QUESNEL)
DISTRICT HIGHWAYS MANAGER (DAWSON CREEK)
DISTRICT HIGHWAYS MANAGER (FORT ST JOHN)
DISTRICT HIGHWAYS MANAGER (VANDERHOOF)
DISTRICT HIGHWAYS MANAGER (McBRIDE)
DISTRICT HIGHWAYS MANAGER (WILLIAMS LAKE)
DISTRICT HIGHWAYS MANAGER (PRINCE RUPERT)
DISTRICT HIGHWAYS MANAGER (TERRACE)
DISTRICT HIGHWAYS MANAGER (DEASE LAKE)
DISTRICT HIGHWAYS MANAGER (SMITHERS)
DISTRICT HIGHWAYS MANAGER (BURNS LAKE)
DISTRICT HIGHWAYS MANAGER (NANAIMO)
DISTRICT HIGHWAYS MANAGER (SAANICH)
DISTRICT HIGHWAYS MANAGER (PORT ALBERNI)
DISTRICT HIGHWAYS MANAGER (COURTENAY)
DISTRICT FERRIES MANAGER (COURTENAY)
● COORDINATED BY REGIONAL DIRECTOR
● DIRECTED BY APPROPRIATE BRANCH DIRECTOR
DIRECT REPORTING RELATIONSHIP
TECHNICAL DIRECTION & VARIED SPECIFIC FUNCTIONAL MANAGEMENT

MAY 1982

ADMINISTRATION AND SERVICES DEPARTMENT

A. E. Rhodes, Assistant Deputy Minister

While there was some reduction in the level of highway construction activity owing to the Government's financial restraint policy, administration and services programs in the Ministry continued high.

The detailed summary of expenditures shown later in the report show the changes in the level of spending as compared to those of 1980/81 with Northeast Coal and Annacis projects still prominent.

At the end of the fiscal year the Ministry's total regular work force continued just under 7,000 positions with an additional 2,769 auxiliary employees (including 267 students) on staff in August 1981, the peak period. A new employee relations section, established in the 1981/82 year handled 205 grievances and participated in 10 formal arbitrations.

Air Services carried out 675 air ambulance flights in the fiscal year, a 16.58 per cent increase over the previous year.

The Property Services Branch settled 946 claims by the end of the fiscal year and 1,196 were in the process of negotiations. Costs totalled $45,729,504.

The Ministry's Building Services Branch was involved in the construction of 13 projects, including the completion of the George Massey Tunnel water and sprinkler system, and in the planning and design of 10 others.

Information Services wrote and distributed 312 news releases, handled about 600 pieces of correspondence and 3,500 telephone inquiries from the public, the press and other Ministries, as well as other publications and advertising.

Additional statistics and information for each of the Administration Division branches appear in the individual directors' reports.

HIGHWAYS OPERATIONS DEPARTMENT

T. R. Johnson, P.Eng., Assistant Deputy Minister

Engineering—M. G. Elston, P.Eng., Executive Director

Design and survey work for 1981/82 involved some 299 projects totalling 1 623 km of both two- and four-lane highway. Important among these were the Annacis Project, Northeast Coal access, Highway 97 in the Okanagan, Highway 7, and Highway 1 on Vancouver Island and Highway 16 between Terrace and Prince Rupert.

Geotechnical and Materials Branch completed 32 geotechnical highway design projects, 47 foundation design projects and 51 stability investigations.

A $34,500,000 bridge program was completed by the Bridge Branch, including the McPhee Bridge over the St. Mary's River and the Bridge of the 23 Camels at Lillooet.

The Planning Branch continued to develop some network plans for 56 communities from the previous year, initiated 35 new ones and achieved agreement with municipalities on 21.

Construction—R. G. White, P.Eng., Executive Director

Forty major grading projects were active during 1981/82. Some 76 km of 2-lane and 20 km of 4-lane highway were completed at a cost of $99,000,000.

Twenty-seven paving contracts were active during 1981/82. 1 150 lane-km of highway were paved with asphalt concrete and 800 lane-km were surface treated.

During the fiscal year 335 km of highway right of way were defined by legal survey.

Operations—P. J. Carr, P.Eng., Executive Director

The Provincial Highway Maintenance budget had some reductions from the previous budget year due to funding restraints. With this trend it took a concerted effort by operational managers, supervisors and crews to maintain road and bridge maintenance and the operation of the Ministry ferry fleet to acceptable levels of service.

Overall, the passenger and vehicular traffic carried on the Ministry ferry fleet on 35 routes increased marginally over the previous year with each increasing by one per cent.

A 70-car double-ended ferry is under construction for the Nanaimo–Gabriola Island route. This vessel will go into service in the summer of 1982.

The vessel *Princess of Vancouver* was purchased by the Ministry from the C.P.R. for the Comox–Powell River route. Conversion of the *Princess of Vancouver* to a roll-on, roll-off ferry is underway and it will go into service in the summer of 1982.

A minor betterment program to undertake miscellaneous improvements to substandard sections of the road network and reduce maintenance costs was successfully completed in the 37 highway districts. The total expenditure for the Province amounted to $10,300,000.

A program of construction and re-construction of minor bridges by district bridge crews continued. In the year a total of 79 bridges was completed in the six regions.

In the fall of 1981 record rainfall experienced in the North Vancouver highways district resulted in extensive damage to the road system. During this time a rock debris flow destroyed a section of the 'M' Creek Bridge on Highway 99. Unfortunately this incident resulted in loss of life.

Heavy snowfall was experienced, particularly in the Nelson, Prince George and Terrace regions in the 1981/82 winter. Operational crews in districts of these regions were hard pressed to keep the highways and road system in good winter condition.

A combination of heavy snow pack and temperatures experienced resulted in substantial avalanche activity in the Nelson and Terrace regions. Numerous highway closures were necessary for avalanche control and the safety of the travelling public.

More details and statistics of operations, engineering and construction are given in the individual directors' reports.

TRANSPORTATION POLICY DEPARTMENT

D. A. Kasianchuk, Ph.D., Assistant Deputy Minister

This Department, which includes the Transport Policy Analysis Branch, Air Transport Assistance Branch and the Engineering and Inspection Branch carried out a wide variety of programs in support of transportation services in British Columbia.

The Transportation Policy Branch monitored completion of the British Columbia Railway's Fort Nelson extension rehabilitation program and carried out a transportation analysis of the Hat Creek liquification coal proposal, while continuing administration of the Joint Urban Transit Assistance Program (UTAP).

Major studies were carried out dealing with coastal marine facilities, the selection of an airport site for the Tumbler Ridge development, and transportation services for Vancouver Island. The Air Transport Assistance Program funded improvements at 23 community airports, with a total value of $3,658,000.

The Transportation Policy Department continued in its liaison role with Federal and Provincial authorities, the Canadian Transport Commission and the transportation industry.

The Ministry, through its Air Services Branch continued to carry out the air ambulance role, in co-operation with the Ministry of Health, and provided aerial photography services and air transportation for the Provincial Government.

MOTOR VEHICLE DEPARTMENT

R. G. Whitlock, Superintendent

New legislation based upon recommendations of the Motor Vehicle Department Task Force to control poor drivers was introduced in the Legislature.

The Motor Vehicle Department participated in the development of CAVR, Canadian Agreement on Vehicle Registration, which lessens the cost of highway transportation industry to operate on a national basis. The fleet licensing concept was expanded to include the farming industry.

Load security regulations were developed to concert with associations representing the Canadian Trucking Industry, the B.C. Motor Transport Association and other associations representing the highway transportation industry in British Columbia. A highway safety committee was established to look into the operation of commercial vehicles on our highways, with a view to improving highway safety.

Construction began on two new weigh scales at Parksville to eliminate the concerns over large commercial vehicles having to cross the highway to enter and leave the scales.

SENIOR MINISTRY PERSONNEL
As At March 31, 1982

The Honourable Alex. V. Fraser, Minister of Transportation and Highways

R. G. Harvey, P.Eng., Deputy Minister Transportation and Highways

ADMINISTRATION AND SERVICES DEPARTMENT

A. E. Rhodes, Assistant Deputy Minister
A. R. Limacher, Director of Personnel Programs
S. E. Price, Director of Financial Services
P. S. Perry, Director of Aircraft Services
A. C. Brown, Director of Property Services
D. Grey, Manager, Building Services
R. J. Baines, Senior Information Officer
R. A. Fisher, Contract Documents Officer
G. A. Cavin, Insurance and Claims Officer

HIGHWAY OPERATIONS DEPARTMENT

T. R. Johnson, P.Eng., Assistant Deputy Minister
M. G. Elston, P.Eng., Executive Director, Engineering Division
E. E. Readshaw, P.Eng., Director of Highway Design and Surveys
J. W. G. Kerr, P.Eng., Director of Geotechnical and Materials Engineering
L. C. Johnson, P.Eng., Director of Bridge Engineering
H. F. Coupe, P.Eng., Director of Traffic Engineering
J. Lisman, P.Eng., Highway Safety Engineer
D. R. Parkes, P.Eng., Director of Planning
R. G. White, P.Eng., Executive Director, Construction Division
N. R. Zapf, Director of Construction
D. F. Martin, P.Eng., Director of Paving
P. J. Carr, P.Eng., Executive Director, Operational Services Division
Vacant, Director of Maintenance Services
E. A. Lund, P.Eng., Director of Equipment Services

TRANSPORTATION POLICY DEPARTMENT

D. A. Kasianchuk, Ph.D., Assistant Deputy Minister
G. A. Clark, Director Transport Policy Analysis
F. H. Christensen, P.Eng., Director, Engineering Inspection
A. Shaw, C.A.M., Director of Special Projects

MOTOR CARRIER COMMISSION

Judge G. R. Sutherland, Chairman
A. R. Fitch, Superintendent of Motor Carriers

MOTOR VEHICLE DEPARTMENT

R. G. Whitlock, Superintendent of Motor Vehicles
P. K. Jackman, Deputy Superintendent Vehicle and Driver Licensing
P. Toogood, P.Eng., Director Standards and Compliance
J. F. Phillips, Director Administration and Safety Programs

HIGHWAY FIELD OPERATIONS

Region 1

W. E. Mercer, P.Eng., Regional Director, Highways
R. W. Veitch, Regional Manager, Maintenance
R. A. R. Fru, P.Eng., Regional Manager Construction
G. Garlinge, Regional Manager, Highway Design and Surveys
B. W. R. Eastman, P.Eng., Regional Geotechnical and Materials Engineer
J. Hynds, Regional Manager, Paving
W. Montgomery, Regional Property Negotiator
R. D. Page, Regional Traffic Superintendent
T. R. Yearsley, Regional Manager, Equipment Services
R. Winbow, District Highways Manager
T. M. Forsyth, District Highways Manager
H. F. Blunden, District Highways Manager
P. S. Dunn, District Highways Manager
T. A. Tasaka, P.Eng., Dock Engineer
H. Gutteridge, District Electrical Manager

Region 2

R. W. Gittins, P.Eng., Regional Director, Highways
D. C. MacVicar, Regional Manager, Maintenance
A. W. Slater, P.Eng., Regional Manager Construction
A. W. G. Smith, Regional Manager, Highway Design and Surveys
Vacant, Regional Geotechnical and Materials Engineer
J. F. Meidinger, Regional Manager, Paving
G. A. Ward, Regional Property Negotiator
J. T. Evans, Regional Manager, Equipment Services
S. J. Sviatko, District Highways Manager
W. A. Budden, District Highways Manager
J. E. Steven, District Highways Manager
B. D. Hunter, P.Eng., District Highways Manager
D. L. Byers, P.Eng., District Highways Manager
J. C. Jensen, P.Eng., Dock Engineer
W. J. McDonald, District Highways Manager

Region 3

W. M. Sproul, P.Eng., Regional Director, Highways
H. J. Kelsall, P.Eng., Regional Manager, Maintenance
G. J. Sutherland, P.Eng., Regional Manager Construction
P. J. Bonser, Regional Manager, Highway Design and Surveys
P. Barnes, P.Eng., Regional Geotechnical and Materials Engineer
R. Pratt, Regional Manager, Paving
J. Mintak, Regional Property Negotiator
R. E. Johnson, Regional Manager, Equipment Services
W. R. Ball, District Highways Manager
R. E. McKeown, District Highways Manager
H. L. Good, District Highways Manager
G. F. Kazakoff, District Highways Manager
H. F. Popoff, District Highways Manager
G. K. Austin, District Highways
J. W. Lay, District Highways Manager
D. L. Oliver, District Highways Manager
L. S. Fransson, District Highways Manager

Region 4

L. A. Broddy, P.Eng., Regional Director, Highways
Vacant, Regional Manager, Maintenance
D. Chisholm, P.Eng., Regional Manager Construction
E. A. Beaumont, P.Eng., Regional Manager, Highway Design and Surveys
G. C. Stock, P.Eng., Regional Geotechnical and Materials Engineer
F. E. Martens, Regional Manager, Paving
E. S. Gowman, Regional Property Negotiator
G. A. Warrington, Regional Manager, Equipment Services
S. Young, P.Eng., District Highways Manager
A. N. Hepp, District Highways Manager
S. D. Gladysz, District Highways Manager
K. E. Bespflug, P.Eng., District Highways Manager
A. W. Horsnell, District Highways Manager
S. Paloposki, Dock Engineer

Region 5

D. P. Doyle, P.Eng., Regional Director, Highways
N. Hope, P.Eng., Regional Manager, Maintenance
D. N. Moore, P.Eng., Regional Manager Construction
D. Nyland, P.Eng., Regional Geotechnical and Materials Engineer
P. M. Wightman, P.Eng., Regional Bridge Maintenance and Works Engineer
S. C. Christensen, Regional Manager, Paving
J. McDonnel, Regional Property Negotiator
E. J. Robinson, Regional Manager, Equipment Services
J. Ryan, District Highways Manager
W. E. Stanley, District Highways Manager
D. H. Hutton, District Highways Manager
H. A. Ronmark, District Highways Manager
D. S. Kirk, District Highways

Region 6

B. A. L'Hirondelle, P.Eng., Regional Director, Highways

A. L. Freebairn, P.Eng., Regional Manager, Maintenance

R. K. Dash, Regional Manager Construction

B. T. Nielsen, P.Eng., Regional Manager, Paving

R. E. Burnett, Regional Property Negotiator

S. Cutt, Regional Manager, Equipment Services

A. J. Montador, P.Eng., Regional Geotechnical and Materials Engineer

J. A. Cambrey, Regional Manager, Design and Surveys

J. W. Morris, District Highways Manager

G. W. Harper, District Highways Manager

R. W. Ellis, District Highways Manager

G. R. Kent, P.Eng., District Highways Manager

P. D. Hughes, District Ferry Manager

ADMINISTRATION AND SERVICES

REPORT OF THE DIRECTOR OF PERSONNEL PROGRAMS

A. R. Limacher

The approved full-time work force of the Ministry reached 6,921 positions during the 1981/82 fiscal year. All sections of the Personnel Branch had an extremely busy year. An average of 100 position competitions, 20 grievances and appeals, 50 compensable W.C.B. accidents, 20 classification reviews, 85 course applications, 11 retirements and 15 transfers were processed each month.

Major organizational changes were implemented in the Branch during the year. Separate functional sections were established to provide specialized expertise to better serve the needs of Ministry management. A report for each section is covered below.

PERSONNEL OPERATIONS AND OCCUPATIONAL HEALTH AND SAFETY PROGRAMS SECTION

This section, headed by a manager, provides generalist personnel and occupational health and safety services throughout the Ministry through eight Regional Personnel Officers, one Coordinator and six Regional Occupational Health and Safety Officers.

A total of 1,247 positions was posted for competition during the year. The Public Service Commission advertised 627 and the balance of 620 were posted by the Ministry through Headquarters, Branches, Regions and Districts.

The Ministry has continued to meet seasonal and temporary work requirements through hiring of auxiliary employees. The total number of auxiliary employees fluctuated seasonally but reached a peak in August 1981 with a total of 2,769 including 267 students.

The section responded to 45 promotional appeals and processed 50 applications to the screening committee. Placement in other positions were made for 11 employees who, due to advancing years, temporary disablement, industrial injury or industrial illness, were unable to perform their regular duties. Another 10 cases were either withdrawn or rejected and 29 remaining outstanding.

In keeping with the current B.C.G.E.U. Master Agreement, hours of work disputes, which cannot be settled by negotiations between the parties, may be resolved by an Hours of Work Umpire. Personnel officers of this Ministry were involved in 22 work schedule disputes, being responsible for assisting in or presenting management's case before Hours of Work Umpires.

In 1981, the Ministry reported a total of 625 compensable injuries, down from the 778 injuries reported in 1980. Of these, 303 injuries resulted in loss of time beyond the day of the accident. Also included was one fatality to a Ministry employee. A total of 8,892 days lost was assessed against the Ministry.

The direct cost for compensation, including payouts for disabilities and medical aid costs in 1980, totalled $1,568,199.40.

The Ministry had a total of 12,794,407 hours of work exposure resulting in accountable accident frequency of 36.3 accidents per one million man hours worked.

Region 5 won the Minister's Safety Trophy for the lowest countable accident frequency among regions. Regional safety awards winners were Gibsons, Kamloops, New Denver, Vanderhoof, Dease Lake and Nanaimo. The Needles Ferry was the recipient of the Marine Services Award for the second consecutive year.

The Ministry currently has 168 industrial first aid attendants and provided safety-oriented first aid training to over 1,500 employees in 1981. Additional training was provided in cardio-pulmonary resuscitation, traffic control, dangerous goods emergencies, fire protection, materials handling, welding safety, hand tools for field use and techniques of safety management. The hearing conservation program resulted in over 2,500 audio-metric tests being given to employees as well as counselling in prevention of hearing loss.

STAFF DEVELOPMENT AND TRAINING SECTION

This section had an active year with Ministry personnel showing continued interest and participation in the various training programs.

The Highway Technology Training Program currently offers 26 predominately self-instructional courses with nine additional courses under different levels of development. From 1972 to the end of this fiscal year, 8,053 courses have been taken by employees with a 50 per cent completion rate to date. Of the 2,400 employees currently and actively enrolled, there has been a 30 per cent increase over last year in the number of course enrollments. A total of 140 employees has qualified for the Level 1 Certificate which is a level of accomplishment requiring approximately 240 hours student study time.

There have been an additional 1,015 applications processed for other courses offered by various Ministries, institutions and agencies.

In addition to the promotion and assistance to employees participating in the Highway Technology Training Program, a closer training liaison with the Regions and Branches was established by having the field training coordinators begin evaluating existing courses and assessing other training needs.

Staff training via satellite continued this year with the presentation of six interactive sessions on the Knowledge Network of the West. Approximately 400 employees participated in these sessions. Topics discussed included avalanche hazards, dangerous goods emergencies, application of de-icer chemicals and maintenance management.

The Ministry has 67 apprentices indentured in five trade groups: heavy duty mechanics, industrial electricians, electronics, auto body repair and welding.

During this fiscal year, 12 apprentices graduated and received their Tradesman Qualification Certificates. Approximately 50 tradesmen attended upgrading courses through community colleges and other training facilities.

Managers in industry must be very cost conscious and are quick to accept any employee training program that can improve production. Managers in the Ministry also acknowledge that a well trained employee is an asset.

Within the last decade, road maintenance equipment has become more and more complicated and sophisticated, to the extent that equipment operators are becoming specialists. To acquire this level of competence, it requires an ongoing, on-the-job training program. In 1981, more than 22,000 hours of such training was recorded in the Ministry. The majority of this training was conducted by District training operators, employees who have demonstrated an interest and ability for this additional responsibility.

A series of grader operator upgrading courses were conducted at Kamloops, with 36 graduates returning to their home Districts able to provide a better service to the motoring public.

A short (three day) course, dealing with safe operation of light hydraulic cranes, was developed late in the year for the Dock District and has received such positive response that it is proposed to extend it to other areas of the Ministry that have expressed a need for this training.

Other courses are being developed to complement the equipment operator training, and will be introduced as time and funding are available.

Ministry vehicles travelled over 177 million km in 1981. There were 689 vehicle accidents reported and 390 (approximately 56 per cent) were evaluated as preventable.

The audio-visual component continues to be an integral part of the Staff Development Section with the increasing of several services, as well as expanding into some new and exciting areas.

Some of the highlights last year were the production of three 30-second TV spots. The messages dealt with "snowplows", "avalanches" and "flagpersons". They were produced through the Government Production Centre and aired on public television from January to March 1982.

A continued effort was made in the acquisition of A/V software for the Headquarters and Regional libraries. Eighteen new programs have been added to the audio-visual catalogue. A number of these films and tapes are used with an existing training program. The "Traffic Control Course," for our flagpersons, is one of these. Over 100 slide sets for this course were updated last year and a new audio cassette was produced to accompany the manuals.

EMPLOYEE RELATIONS SECTION

This new section was established in the Branch this year to specifically handle employee relations matters.

The staff investigated and responded to 205 grievances and participated in 10 formal arbitrations during the year.

The number of grievances was down from 3.67 per 100 employees in 1980 to 2.29 per 100 in 1981.

A system of expedited arbitration was established between the Government Employee Relations Bureau and the B.C.Government Employees Union during the year, to reduce the large backlog of relatively minor grievances that were outstanding. Single arbitrators were appointed to hear the merits of cases and to give non-precedent setting decisions on the basis of the facts presented. The hearings were normally short and the system has the advantage of resolving grievances more quickly, reducing conflict in the work place and reducing the number of costly formal arbitrations.

Although no collective bargaining took place during the year, it was the last year of the three-year B.C.G.E.U. agreement and preparations for bargaining began through the formal collecting of proposals, data and the appointing of Ministry representatives to participate in negotiations in 1982.

ORGANIZATION AND CLASSIFICATION SERVICES SECTION

This new section provides establishment, organization and classification services to the Ministry.

The approved work force of the Ministry increased by 45 positions during the year adding staff to our maintenance operations in the Peace River, Motor Carrier Branch and Motor Vehicle Department, resulting in an approved work force of 6,921 positions as at March 31, 1982.

The staff processed approximately 200 individual position classification reviews during the year and completed organizational and position reviews in the Insurance and Claims office, Aircraft Services Branch avionics section, district highways managers and regional managers, as well as Maintenance, Construction, Paving, and Design and Surveys Branches.

The staff also participated in the following major studies:

	No. of Positions	Status
District Office Study	Approx. 250	Completed
Technical Crew Study	Approx. 270	Nearing completion
Stockman Study	Approx. 200	Approx. 70 per cent completed
Planning Branch Study	Approx. 75	Approx. 50 per cent completed
Garage Study	Approx. 600	Completed and being implemented
Bridgeworker Study	Approx. 200	60 per cent completed
Painters, Carpenters, Communications Study	Approx.200	60 per cent completed

Heavy Equipment Operator Study	Approx. 2,200	50 per cent completed
Operational Services Group Study	Approx. 700	10 per cent completed

In addition to the above, the staff in the section is coordinating preparation of detailed organization charts covering all management units in the Ministry. The majority have been completed. The staff have also participated in various Ministry and Government Employee Relations Bureau committees relating to organization and classification.

ADMINISTRATIVE SUPPORT SERVICES SECTION

This section provides administrative support to the Branch and processes all documents, appointments and maintains comprehensive records.

Major improvements to administrative procedures and records were implemented this year through the introduction of word processing equipment and computerized establishment records. These improvements permitted an increase in output and a higher level of service with the same level of staff. Installation of the computer terminal also permitted a direct link with the Comptroller General's central pay records and personnel management system. The establishment system, which is unique to this Ministry, also enables the efficient monitoring of the performance evaluation system as well as providing up-to-date reports for management units.

The section processed relocation expenses totalling $926,011 for 185 employees.

During the year, documents were processed for 132 employees who retired, with 58 receiving Meritorious Service Scrolls. In recognition of long service, 112 employees received 25-year certificates and 23 employees were honoured with 35-year gold watches by the Government.

REPORT OF THE DIRECTOR OF FINANCIAL SERVICES

S. E. Price

The following pages disclose in detail the Ministry of Transportation and Highways expenditures for the fiscal year 1981–82.

The total gross expenditure of $670,593,449 for the period represents an increase of $20,497,863 or 3.15% over the preceding fiscal period.

The Highway Maintenance costs have increased by 9.46% to cover inflationary costs and a modest increase in road inventory plus some extra provision for improved ferry service to the public. A relatively normal winter was experienced in many areas in 1981–82 which resulted in considerably more winter maintenance costs than in 1980–81 which was by comparison a relatively mild winter.

The Highway Construction Capital costs decreased from $341,223,514 in fiscal year 1980–81 to $339,355,036 in fiscal year 1981–82 a decrease of $1,868,478 or .55%. Such decrease is due chiefly to the reduction of approximately $11.7 million in expenditures on the Highway 23, Revelstoke–Mica relocation projects as several portions of this highway relocation have now been completed. Major construction work continued on the Fraser River Crossing (Annacis) and North East Coal Development Access Highway from Chetwynd to Tumbler Ridge Townsite. Additional funding of approximately $21.8 million was provided by Bill 7, *Special Funds Act, 1980* (Fraser River Crossing Fund) to assist the Ministry in financing the major bridge crossing at Annacis Island.

The Motor Vehicle Branch expenditures increased from the previous fiscal period by $2,516,889 or 14.41% which covers inflationary costs plus additional servicing costs to cover increase in vehicles and drivers.

The Air Services Branch expenditures increased from the previous fiscal year by $550,564 or 17.33% due to inflationary costs on fuel, parts and supplies. No additional aircraft were purchased, replaced, or sold during the fiscal period.

The Ministry continued to provide, through the Air Transport Assistance Program, grants to Municipalities, Regional Districts and Societies for the development, construction and improvement of local air transport facilities with total funds expended of $3,677,034 in fiscal year 1981–82 as compared to $4,074,324 in fiscal year 1980–81.

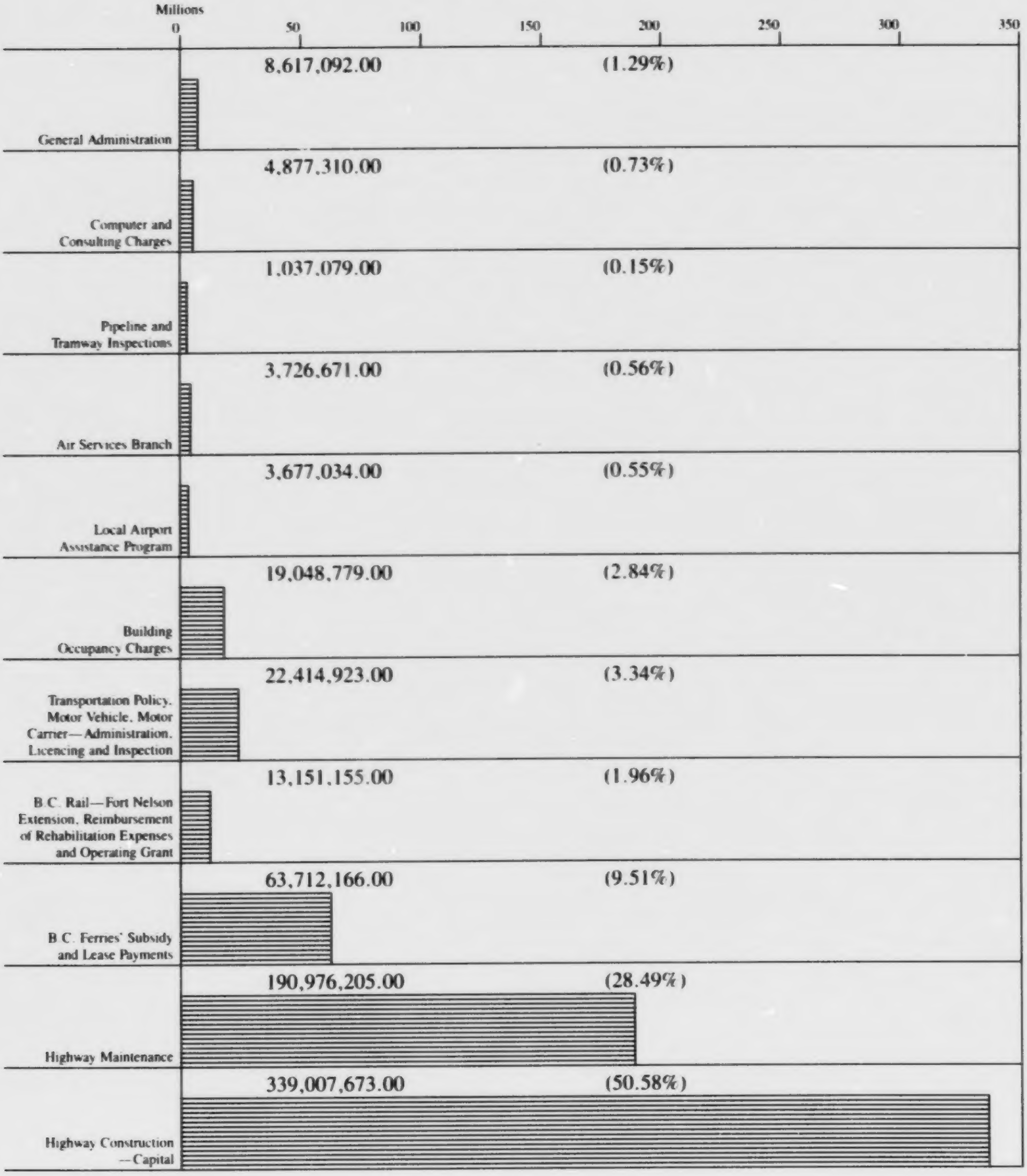
The Ministry continued to assist financially B.C. Rail by providing $9,251,155 for the rehabilitation, on-going capital improvements and operating subsidy for the Fort Nelson Extension and a further $3,900,000 for assisting in purchasing passenger equipment and providing a passenger service subsidy.

The Ministry in co-operation with the B.C. Buildings Corporation took over the jurisdiction of constructing and maintaining the weigh scale stations throughout the Province, a function previously performed by the B.C. Buildings Corporation.

S. E. PRICE
Director of Financial Services

HOW THE TRANSPORTATION AND HIGHWAYS DOLLAR WAS SPENT

Fiscal year 1981/82



MINISTRY OF TRANSPORTATION AND HIGHWAYS

SUMMARY OF EXPENDITURES, FISCAL YEAR 1981–82

Vote Number	Vote Description	1981/82 Vote Estimates	1981/82 Total Expenditures Cash Basis	1981/82 Accruals	1981/82 Total Expenditures Accrual Basis	1981/82 Net Over (Under) Expenditures	1980/81 Total Expenditures
		$	$	$	$	$	$
189	Minister's Office	213,962.00	205,209.86	—	205,209.86	(8,752.14)	192,406.62
190	General Administration—Highways	7,679,067.00	7,406,471.06	10,257.02	7,416,728.08	(262,338.92)	6,414,505.47
191	General Administration—Transportation	1,064,894.00	995,154.33	—	995,154.33	(69,739.67)	969,357.98
192	Highway Maintenance	195,919,712.00	193,797,094.50	(2,820,889.89)	190,976,204.61	(4,943,507.39)	174,467,706.26
193	Highway Construction	288,993,088.00	285,235,548.93	23,718.57	285,259,267.50(1 & 2)	(3,733,820.50)	189,428,086.67
194	Hydro Development—Highways	10.00	34,661,067.07	(2,417,184.81)	32,243,882.26(3)	32,243,872.26	43,975,604.50
195	Engineering Branch	1,070,533.00	1,037,079.01	—	1,037,079.01	(33,453.99)	849,056.86
	Weigh Scale Branch	—	—	—	(4)	—	3,420,558.96
196	Motor Vehicle Branch	23,582,731.00	19,984,369.21	—	19,984,369.21	(3,598,361.79)	14,046,920.70
197	Motor Carrier Branch	1,360,825.00	1,330,870.38	—	1,330,870.38	(29,954.62)	1,136,365.02
198	Motor Carrier Commission	354,851.00	326,669.58	—	326,669.58	(28,181.42)	255,600.51
199	Transportation Policy Analysis Branch	1,439,776.00	757,191.41	15,822.80	773,014.21(5)	(666,761.79)	787,207.31
200	Air Services Branch	3,798,669.00	3,726,670.69	—	3,726,670.69(6)	(71,998.31)	3,176,106.77
201	Air Transport Assistance Program	4,000,000.00	3,677,033.92	—	3,677,033.92	(322,966.08)	674,324.78
202	British Columbia Ferries	63,713,476.00	63,712,165.52	—	63,712,165.52(7)	(1,310.48)	57,928,384.00
203	British Columbia Railway	13,200,000.00	13,151,155.00	—	13,151,155.00	(48,845.00)	14,000,000.00
204	Building Occupancy Charges	19,717,071.00	19,048,779.14	—	19,048,779.14	(668,291.86)	15,348,961.50
205	Computer and Consulting Charges	4,892,550.00	4,877,310.30	—	4,877,310.30	(15,239.70)	4,080,539.98
	Bill 5—*Special Purpose Appropriation Act, 1980*	—	—	—	—	—	103,112,087.50
	Bill 7—*Special Funds Act, 1980* (Fraser River Crossing)	—	21,851,886.23	—	21,851,886.23	—	8,107,736.13
	S/W 19—B.C. Steamships Co. (1975) Limited	—	—	—	—	—	7,700,000.00
	Revenue Act—Interest on Overdue Accounts	—	—	—	—	—	24,068.77
	TOTAL, GROSS EXPENDITURES	631,001,215.00	675,781,726.14	(5,188,276.31)	670,593,449.83(8)	17,740,348.60	650,095,586.29

Notes: (1) The sum of $6,250,262.70, the cost of constructing the *M.V. Quinsam*, is included under Vote 193—Ferries, however, this vessel was sold to the B.C. Ferry Corporation at fiscal year end for the amount of $6,200,000.00 which was credited to General Revenue.

(2) The sum of $347,363.27 has been reflected against Vote 193 which represents the amount not included in the Accounts Receivable Accruals under Vote 194 Hydro Development Highways. This amount will be recovered from B.C. Hydro and Power Authority in the following fiscal year.

(3) The sum of $31,896,519.00 was recovered from B.C. Hydro and Power Authority with the sum of $347,363.27 expended but to be recovered in the following fiscal year.

(4) Effective Fiscal Year 1981–82, expenditures for the Weigh Scale Branch are reflected against the Motor Vehicle Branch, Commercial Transport Division.

(5) The Ministry via the Consolidated Revenue Fund recovered $125,000.00 from the Federal Government in connection with a Federal/Provincial cost sharing agreement for a Marine Facilities Study.

(6) The sum of $722,456.00 was recovered from "other Ministries" using the Air Services Branch.

(7) Comprised of the Annual Highway Equivalent Subsidy to the B.C. Ferry Corporation ($58,890,776.00) and lease payments ($4,821,389.52) for three vessels operated by the Corporation.

(8) Included in this figure is the sum of $5,188,276.31 cr which was credited to fiscal year 1981–82 in conjunction with the Modified Accruals Accounting implemented by the Office of the Comptroller-General.

MINISTRY OF TRANSPORTATION AND HIGHWAYS

SUMMARY OF EXPENDITURE BY VOTE, FISCAL YEAR 1981/82

1980/81					1981/82			
$	$	$	$		$	$	$	$
192,406.62				Vote 189—Minister's Office				205,209.86
6,414,505.47				Vote 190—General Administration—Highways				7,416,728.08
969,357.98				Vote 191—General Administration—Transportation				995,154.33
				Vote 192—Highway Maintenance				
			122,873,054.58	Roads	119,978,083.64			
			26,440,730.00	Snow removal	44,973,930.00			
		138,810,182.38	10,503,602.20cr.	Intra-Ministry Materials useage credits	8,077,776.04cr.	156,874,237.60		
		8,792,024.34		Bridges		8,582,609.79		
	173,096,092.86	25,493,886.14		Ferries		28,135,456.12	193,592,303.51	
		50,863,639.12		Machinery operation and repairs, etc.		55,473,251.46		
174,467,706.26	1,371,613.40	49,492,025.72cr.		Intra-Ministry equipment rental credits		58,089,350.36cr.	2,616,098.90cr.	190,976,204.61
				Vote 193—Highway Construction—Capital				
				Roads				
		2,769,415.00		Municipal Amalgamation Grants		2,099,580.19		
		163,151.30		Archaeological explorations		200,000.00		
		3,706,657.67		Equipment capital purchases		2,701,428.08		
		8,083,828.17		Geotechnical and materials testing		8,382,391.64		
		482,984.38		Legal surveys		559,279.43		
		588,077.42		Radio-telephone installations		733,729.77		
		4,050,924.57		Rights-of-way and property purchases		33,627,295.64		
		81,838,674.96		Roads construction		120,717,396.47		
		1,843,086.75		Roadside development		1,395,174.31		
		520,641.82		Safety measures and accident reference markers		479,132.09		
		362,110.19		Scientific and Technical Equipment		603,577.36		
		1,966,132.55		Secondary Highways		1,465,072.01		
		3,388,912.83		Signals, lighting etc.		3,838,712.42		
	118,779,170.72	9,014,573.11		Surveys generally		8,696,754.50	185,499,523.91	

MINISTRY OF TRANSPORTATION AND HIGHWAYS

SUMMARY OF EXPENDITURE BY VOTE, FISCAL YEAR 1981/82—*Continued*

1980/81					1981/82		
$	$	$	$		$	$	$
				Vote 193—Highway Construction—Capital—*Continued*			
				Bridges, ferries and landings			
		16,405,619.91		Bridges	29,086,407.89		
		3,030,365.99		Ferries	15,002,055.12(1)		
	20,573,577.97	1,137,592.07		Ferry landings	3,409,426.04	47,497,889.05	
189,428,086.67	50,075,337.98			Hardsurfacing		52,261,854.54	285,259,267.50(2)
				Vote 194—Hydro Development—Highways			
	36,835,211.16			Roads construction (Gross Expenditure)		23,710,151.88	
	7,093,060.55			Bridges (Gross Expenditure)		6,344,224.15	
43,975,604.50	47,332.79			Hardsurfacing (Gross Expenditure)		2,189,506.23	32,243,882.26(3)
849,056.86				Vote 195—Engineering Branch—Transportation			1,037,079.01
				Vote 196—Motor Vehicle Branch			
	833,873.75			Administration		1,293,639.11	
	4,803,563.34			Motor Vehicle Division		6,124,307.81	
	3,550,272.08			Motor Vehicle Inspection Division		3,679,369.08	
	4,859,211.53			Drivers' Licence Division		5,240,222.63	
17,467,479.66	3,420,558.96			Commercial Transport Division		3,646,830.58	19,984,369.21
1,136,365.02				Vote 197—Motor Carrier Branch			1,330,870.38
255,600.51				Vote 198—Motor Carrier Commission			326,669.58
				Vote 199—Transportation Policy Analysis Branch			
	538,109.81			Administration		681,014.20(4)	
	87,359.99			Grants and subsidies		92,000.01	
787,207.31	161,737.51			North East Coal Development project		Non-applicable	773,014.21
				Vote 200—Air Services Branch			
3,176,106.77				Expenditures		4,460,324.19	
				Recoveries		733,653.50cr.	3,726,670.69(5)
674,324.78				Vote 201—Air Transport Assistance Program			3,677,033.92
57,928,384.00				Vote 202—British Columbia Ferries			63,712,165.52(6)
14,000,000.00				Vote 203—British Columbia Railway			13,151,155.00

MINISTRY OF TRANSPORTATION AND HIGHWAYS

SUMMARY OF EXPENDITURE BY VOTE, FISCAL YEAR 1981/82—*Continued*

1980/81					1981/82		
$	$	$	$		$	$	$
				Vote 204—Building Occupancy Charges			
		2,201,984.15		Occupancy charges—Transportation	2,720,330.90		
	2,202,774.03	789.88		Tenant improvement charges—Transportation	179,797.00	2,900,127.90	
		12,740,717.85		Occupancy Charges—Highways	15,441,164.10		
15,348,961.50	13,146,187.47	405,469.62		Tenant improvement charges—Highways	707,487.14	16,148,651.24	19,048,779.14
				Vote 205—Computer and Consulting Charges			
	2,406,175.45			Transportation charges		2,731,785.35	
4,080,539.98	1,674,364.53			Highways charges		2,145,524.95	4,877,310.30
				Bill 5—*Special Purpose Appropriation Act, 1980*			
	3,400,000.00			Transportation—Local Airport Assistance Program			
				Highways			
		67,290,884.90		Roads construction			
		1,148,038.61		Fencing			
		3,010,226.15		Guardrail			
		12,948,046.31		Bridges			
		46,935.50		Ferries			
		470,465.18		Ferry Landings			
103,112,087.50	99,712,087.50	14,797,490.85		Hardsurfacing			Non-applicable
				Bill 7—*Special Funds Act, 1980* (Fraser River Crossing)			
8,107,736.13				Roads Construction		17,799,816.68	
Non-applicable				Bridges		4,052,069.55	21,851,886.23
7,700,000.00				Special Warrant No. 19—B.C. Steamships Co. (1975) Ltd.			Non-applicable
				Revenue Act (R.S.B.C. 1979, chapter 367, section 59)			
24,068.77				Interest on Overdue Accounts			Non-applicable
650,095,586.29				TOTAL, GROSS EXPENDITURE			670,593,449.83(7)

Notes: (1) The sum of $6,250,262.70, the cost of constructing the *M.V. Quinsam*, is included under Vote 193—Ferries, however, this vessel was sold to the B.C. Ferry Corporation at fiscal year end for the amount of $6,200,000.00 which was credited to General Revenue.

(2) The sum of $347,363.27 has been reflected against Vote 193 which represents the amount not included in the Accounts Receivable Accruals under Vote 194 Hydro Development Highways. This amount will be recovered from B.C. Hydro and Power Authority in the following fiscal year.

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(4) The Ministry via the Consolidated Revenue Fund recovered $125,000.00 from the Federal Government in connection with a Federal/Provincial cost sharing agreement for a Marine Facilities Study.

(5) The sum of $722,456.00 was recovered from "other Ministries" using the Air Services Branch.

(6) Comprised of the Annual Highway Equivalent Subsidy to the B.C. Ferry Corporation ($58,890,776.00) and lease payments ($4,821,389.52) for three vessels operated by the Corporation.

(7) Included in this figure is the sum of $5,188,276.31 cr. which was credited to fiscal year 1981-82 in conjunction with Modified Accruals Accounting implemented by the Office of the Comptroller-General.

DETAILS OF BUDGETARY EXPENDITURES BY APPROPRIATIONS (VOTES, BILLS AND SPECIAL WARRANTS), AND BY STANDARD EXPENDITURE CLASSIFICATIONS

Vote 189 MINISTER'S OFFICE

This vote provides for the office of the Minister of Transportation and Highways, including his salary and expenses and those of his immediate staff.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	152,840	Salaries		165,560
	769	Temporary assistance		
	$153,610			$165,560
	27,255	Travel expense		27,116
	11,430	Office expense		12,534
	110	Materials and supplies		
$212,089	$192,406		$213,962	$205,210

Vote 190 GENERAL ADMINISTRATION—HIGHWAYS

This vote provides for the overall policy direction of the Ministry, including the offices of the Deputy Minister and Assistant Deputy Ministers, as well as administrative and support services to the operational, planning, construction and research programs.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	4,365,002	Salaries		4,997,948
	327,551	Temporary assistance		402,845
	$4,692,553			$5,400,793
	300,083	Travel expense		327,359
	218,574	Professional and special services		340,162
	969,108	Office expense		1,038,385
	51,295	Office furniture and equipment		58,446
	81,779	Advertising and publications		106,924
	88,270	Materials and supplies		116,934
	1,899	Rentals—outside suppliers		3,017
	10,940	Acquisition—machinery and equipment		24,703
		Interest on overdue accounts		5
$6,423,536	$6,414,505		$7,679,067	$7,416,728

Vote 191 GENERAL ADMINISTRATION—TRANSPORTATION

This vote provides for the overall policy direction of the Transportation Division of the Ministry, including the office of the Assistant Deputy Minister, as well as administrative and support services to the operational, planning and research programs.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	571,959	Salaries		577,998
	39,362	Temporary assistance		53,899
	$611,321			$631,897
	22,157	Travel expense		28,539
	85,834	Professional and special services		70,634
	224,007	Office expenses		225,879
	11,436	Office furniture and equipment		15,669
	5,935	Advertising and publications		1,043
	8,664	Materials and supplies		10,983
		Rentals—intra-ministry		10,505
		Interest on overdue accounts		5
$1,118,973	$969,354		$1,064,894	$995,154

Vote 192 HIGHWAY MAINTENANCE

This vote provides for the maintenance, repair and operation of Provincial highways, roads, bridges, ferries, landings, tunnels, equipment operation and replacement, including winter maintenance of snow and ice removal and the payment of grants, contributions and subsidies.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	79,861,330	Salaries		87,622,410
	24,801,264	Temporary assistance		25,781,339
	$104,662,594			$113,403,749
	3,731,999	Travel expense		4,188,171
	531,141	Professional and special services		308,809
	238,980	Office expense		233,785
	164,489	Office furniture and equipment		193,206
	295,504	Advertising and publications		373,638
	52,823,139	Materials and supplies		64,327,368
	2,069,928	Motor vehicles		1,662,876
	12,024,179	Rentals—outside suppliers		12,797,270
	39,027,304	Rentals—intra-ministry		46,784,835
	3,876,411	Acquisition—land and buildings		2,451,552
	12,376,905	Acquisition—machinery and equipment		10,444,714
	841,704	Grants, contributions and subsidies		834,677
	360,954	Other expenditure		285,133
		Interest on overdue accounts		18,584
		Recoveries		
	49,492,025 cr	Intra-ministry		58,089,350 cr
		Other recoveries		574 cr
	9,065,504 cr	British Columbia Ferries		9,242,238 cr
$179,351,848	$174,467,706		$195,919,712	$190,976,205

Vote 193

HIGHWAY CONSTRUCTION—CAPITAL

This vote provides for the planning, engineering, design, survey, construction, reconstruction, right of way acquisition, property purchase and paving of provincial highways, roads, bridges, ferries, landings and tunnels; purchase of additional machinery and equipment; and payment of authorized grants and contributions to municipalities in connection with their highway systems.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	23,234,403	Salaries		28,465,864
	9,753,011	Temporary assistance		10,901,372
	$32,987,414			$39,367,236
	3,109,040	Travel expense		3,805,550
	4,531,118	Professional and special services		4,330,596
	163,316	Office expense		183,639
	89,998	Office furniture and equipment		74,509
	39,750	Advertising and publications		34,664
	15,327,482	Materials and supplies		26,807,759
	447,597	Motor vehicles		399,060
	13,206,490	Rentals—outside suppliers		27,621,667
	7,242,800	Rentals—intra-ministry		10,400,259
	103,076,659	Acquisition—land and buildings		162,373,595
	4,575,107	Acquisition—machinery and equipment		6,716,363
	4,631,306	Grants, contributions and subsidies		3,120,335
		Interest on overdue accounts		24,035
$208,209,007	$189,428,086		$288,993,088	$285,259,267

Vote 194

HYDRO DEVELOPMENT—HIGHWAYS

This vote provides for the right of way acquisition, planning, engineering design, survey, construction or reconstruction, paving, bridge construction or reconstruction, ferry construction and any other related costs in connection with the construction of Provincial Highway 23, Revelstoke to Mica Creek, and the Waneta-Nelway Highway that results from the construction of the Revelstoke Dam and the Seven Mile Dam by British Columbia Hydro and Power Authority.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	1,424,549	Salaries		1,013,372
	1,098,490	Temporary assistance		751,527
	$2,523,039			$1,764,899
	222,835	Travel expense		297,325
	424,081	Professional and special services		207,889
	11,840	Office expense		6,506
	478	Office furniture and equipment		
	207,364	Materials and supplies		479,396
	277,101	Rentals—outside suppliers		170,753
	320,605	Rentals—intra-ministry		299,070
	39,984,674	Acquisition—land and buildings		29,013,030
	3,581	Acquisition—machinery and equipment		198
		Interest on overdue accounts		4,816
$10	$43,975,604		$10	$32,243,882 (1)

NOTE: (1) The sum of $31,896,519.00 was recovered from B.C. Hydro and Power Authority with the sum of $347,363.27 expended but to be recovered in the following fiscal year.

Vote 195

ENGINEERING BRANCH

This vote provides for processing of applications, monitoring of construction and final inspections, as well as annual inspections and certification of industrial projects subject to the *Railway Act, Pipeline Act*. The Branch examines and certifies operating personnel for railway and aerial tramways and provides a close liaison with the Ministry of Energy, Mines and Petroleum Resources, as well as the Workers' Compensation Board, in matters of standardization of operational safety requirements.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	669,127	Salaries		784,381
	13,717	Temporary assistance		43,096
	$682,844			$827,475
	99,639	Travel expense		77,157
	7,705	Professional and special services		17,579
	21,465	Office expense		18,627
	3,467	Office furniture and equipment		7,859
		Advertising and publications		5
	8,986	Materials and supplies		13,352
	18,881	Motor vehicles		
	605	Rentals—outside suppliers		3,545
		Rentals—intra-ministry		65,780
	5,462	Acquisition—machinery and equipment		5,686
		Interest on overdue accounts		12
$997,476	$849,056		$1,070,533	$1,037,079

Vote 196

MOTOR VEHICLE BRANCH

This vote provides for the registering, licensing and issuance of policies of insurance for motor vehicles; the monitoring of driving records, collection of assessment fees, correlation of penalty points and funds; determining the ability and fitness of persons to operate motor vehicles; the issuance of drivers' licences; maintenance of driver safety, and improvement program; setting motor vehicle standards and motor vehicle safety inspection; the inspection of commercial vehicles regarding weights, dimensions and safety; and road user safety programs.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	13,506,539	Salaries		14,346,867
	704,704	Temporary assistance		712,629
	$14,211,243			$15,059,496
	554,891	Travel expense		407,670
	288,737	Professional and special services		461,344
	508,021	Office expense		415,220
	49,648	Office furniture and equipment		88,034
	134,146	Advertising and publications		379,467
	1,193,022	Materials and supplies		2,203,005
	41,414	Motor vehicles		
	17,118	Rentals—outside suppliers		21,930
		Rentals—intra-ministry		293,208
	73,946	Acquisition—machinery and equipment		123,283
	387,054	Grants, contributions and subsidies		524,752
	8,231	Other expenditure		6,766
		Interest on overdue accounts		194
$19,454,410	$17,467,478		$23,582,731	$19,984,369

Vote 197

MOTOR CARRIER BRANCH

This vote provides for the conducting of investigations into the licensing of the commercial motor carrier industry in the for-hire transportation of freight and passengers; examination of schedules of rates charged by carriers as well as time schedules; the making of recommendations to the Motor Carrier Commission and the implementation of the decisions made by the Commission with respect to such applications; and the safety inspections of public passenger vehicles.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	866,652	Salaries		936,617
	143,519	Temporary assistance		194,745
	$1,010,171			$1,131,362
	39,463	Travel expense		57,026
		Professional and special services		25,424
	64,599	Office expense		46,847
	637	Office furniture and equipment		20,056
		Advertising and publications		1,645
	14,376	Materials and supplies		24,680
	6,056	Motor vehicles		22,896
	1,060	Rentals—outside suppliers		920
		Interest on overdue accounts		14
$1,150,751	$1,136,365		$1,360,825	$1,330,870

Vote 198

MOTOR CARRIER COMMISSION

This vote provides for the regulation of the motor carrier industry intra-provincially as a Provincial Board pursuant to the *Motor Carrier Act*, and extra-provincially as a Federal Board pursuant to the *Motor Vehicle Transport Act* (Canada).

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	172,598	Salaries		195,372
	7,776	Travel expense		24,659
	61,223	Professional and special services		93,781
	5,172	Office expense		6,275
	212	Office furniture and equipment		2,495
	594	Materials and supplies		782
	5,300	Motor vehicles		
	2,723	Rentals—outside suppliers		3,305
$329,756	$255,600		$354,851	$326,669

Vote 199

TRANSPORTATION POLICY ANALYSIS BRANCH

This vote provides for the development, co-ordination, evaluation, and implementation of transportation policies and programs.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	130,779	Salaries		203,920
	56,164	Temporary assistance		60,453
	$186,943			$264,373
	20,629	Travel expense		34,008
	470,687	Professional and special services		366,550
	5,408	Office expense		3,298
	1,023	Office furniture and equipment		825
	2,713	Advertising and publications		2,053
	8,097	Materials and supplies		5,811
	4,344	Rentals—outside suppliers		4,092
	87,359	Grants, contributions and subsidies		92,000
		Interest on overdue accounts		5
$1,323,211	$787,207		$1,439,776	$773,015

Vote 200

AIR SERVICES BRANCH

This vote provides for the provision of aircraft and crews to provide the air services requirements for the Provincial Government, such as air services, air transportation, air training services and aerial photographic services.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	1,364,163	Salaries		1,545,959
	49,938	Temporary assistance		47,352
	$1,414,101			$1,593,311
	44,791	Travel expense		50,390
	22,403	Professional and special services		52,153
	17,598	Office expense		16,315
	3,226	Office furniture and equipment		2,577
		Advertising and publications		9,816
	1,870,060	Materials and supplies		2,626,081
	25,288	Rentals—outside suppliers		33,520
		Rentals—intra-ministry		15,426
	273,973	Acquisition—machinery and equipment		57,134
		Interest on overdue accounts		3,602
		Recoveries		
	495,337 cr	Other recoveries		733,654 cr
$3,108,928	$3,176,106		$3,798,669	$3,726,671

Vote 201

AIR TRANSPORT ASSISTANCE PROGRAM

This vote provides for grants and development, construction, and administration costs relating to the construction or improvement of air transport facilities and navigational aids throughout the Province.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	109,264	Salaries		129,348
	118,694	Temporary assistance		85,420
	$227,958			$214,768
	38,477	Travel expense		49,721
	3,703	Professional and special services		60,639
	82 cr	Office expense		391
	423	Office furniture and equipment		545
	5,477	Advertising and publications		238
	94,707	Materials and supplies		168,960
	303,657	Rentals—outside suppliers		145,299
		Rentals—intra-ministry		40,152
		Grants, contributions, and subsidies		2,996,321
$739,568	$674,324		$4,000,000	$3,677,034

AIR TRANSPORT ASSISTANCE PROGRAM
SUMMARY OF AIRPORT ASSISTANCE PROJECTS

Project	Description	Electoral District	Applicant/Recipient	$
A-0399	Atlin, re-align gravel runway	Atlin	Atlin District Board of Trade	400,000.00
A-0402	Lillooet, construct new gravel airstrip and access roads	Yale-Lillooet	Village of Lillooet	600,918.00
A-0403	Revelstoke, masterplan study, upgrade terminal building	Shuswap-Revelstoke	Columbia-Shuswap Regional District	75,000.00
A-0405	Sechelt, airport masterplan study	Mackenzie	Village of Sechelt	175,000.00
A-0406	Leo Creek, new airstrip construction	Omineca	Work completed by Ministry	19,359.77
A-0407	Dease Lake airstrip, extend gravel runway, including hydroseeding	Atlin	Dease Lake Airport Society	200,000.00
A-0492	Administration and overhead	Headquarters	N/A	223,756.15
A-0587	East Kootenay Regional District, airport site survey	Kootenay	East Kootenay Regional District	100,000.00
A-0788	Powell River Regional District additional tree clearance and earthwork at Texada Airport to meet Class D licence standards and to enable future development of groundsite facilities	Mackenzie	Powell River Regional District	50,000.00
A-0984	Creston Airport, pave runway, taxiway, apron and air terminal building	Nelson-Creston	Village of Creston	150,000.00
A-0985	Chetwynd Airport, install landing aids including runway lighting system and non-directional beacon	South Peace River	Village of Chetwynd	500,000.00
A-0986	Anahim Lake Airport, enlarge apron area	Cariboo	Cariboo Regional District	75,000.00
A-0987	Pemberton Airport, develop new gravel airstrip and access road	West Vancouver-Howe Sound	Village of Pemberton	183,000.00
A-0988	Merritt Airport, earthwork for runway extension, new apron and taxiway	Yale-Lillooet	City of Merritt	250,000.00
A-0989	Likely Airport, upgrade gravel airstrip	Cariboo	Cariboo Regional District	50,000.00
A-0990	Houston Airport, upgrade gravel surface, air terminal building	Omineca	District of Houston	150,000.00
A-0991	Fraser Lake Airport, upgrade gravel runway, apron and taxiway	Omineca	Village of Fraser Lake	100,000.00
A-0992	Fort St. James Airport, upgrade groundside facilities	Omineca	Village of Fort St. James	75,000.00
A-1041	Thompson-Nicola Regional District, install perimeter fencing at Blue River Airport	Kamloops	Thompson-Nicola Regional District	25,000.00
A-1086	Harrison Hot Springs, construct new float dock	Chilliwack	Village of Harrison Hot Springs	50,000.00
A-1104	Airport Owners and Operators Division of the B.C. Aviation Council	Headquarters	B.C. Aviation Council	175,000.00
A-1108	Masset, upgrade float plane base	Prince Rupert	Village of Masset	50,000.00
	Total Grants Awarded:			3,677,033.92

Vote 202

BRITISH COLUMBIA FERRIES

This vote provides for the annual highway equivalent subsidy to the British Columbia Ferry Corporation, and lease payments and related administrative costs for ferries sub-leased to and operated by the Corporation.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	2,157	Professional and special services		1,590
	4,819,800	Rentals—outside suppliers		4,819,800
	53,106,427	Grants, contributions, and subsidies		58,890,776
$57,929,127	$57,928,384		$63,713,476	$63,712,166

Vote 203

BRITISH COLUMBIA RAILWAY

This vote provides for grants to the British Columbia Railway Company to underwrite the cost of rehabilitating the Fort Nelson Extension and compensating the railway for government-mandated services.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	14,000,000	Grants, contributions and subsidies		13,151,155
$14,000,000	$14,000,000		$13,200,000	$13,151,155

Vote 204

BUILDING OCCUPANCY CHARGES

This vote provides for payments to the British Columbia Buildings Corporation for rental and maintenance of buildings, and office accommodation occupied by the Ministry.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	15,348,961	Rentals—outside suppliers		19,048,779
$15,356,000	$15,348,961		$19,717,071	$19,048,779

Vote 205

COMPUTER AND CONSULTING CHARGES

This vote provides for payments to the British Columbia Systems Corporation for data processing and management consulting services.

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	4,080,539	Data systems and processing		4,877,310
$4,080,900	$4,080,539		$4,892,550	$4,877,310

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SPECIAL FUNDS ACT 1980
(FRASER RIVER CROSSING FUND)

1980-81			1981-82	
Appropriations	Actual Expenditures		Appropriations	Actual Expenditures
		Expenditure by standard classification		
	163,224	Salaries		1,255,153
	41,189	Temporary assistance		
	$204,413			$1,255,153
	8,615	Travel expense		44,463
	707,338	Professional and special services		4,203,043
	210	Office expense		4,202
	1,084	Advertising and publications		22,546
	200,852	Materials and supplies		785,259
	59,130	Rentals—outside suppliers		370,636
	41,742	Rentals—intra-ministry		
	6,849,213	Acquisition—land and buildings		15,153,200
	35,134	Acquisition—machinery and equipment		13,384
$30,000,000	$8,107,736		$21,892,264	$21,851,886

STATEMENT OF REVENUE AND EXPENDITURES FOR FERRIES FOR WHICH THE COST OF MAINTENANCE AND OPERATION IS PROVIDED FOR IN MINISTRY OF TRANSPORTATION AND HIGHWAYS ESTIMATES

Name of Ferry	Revenue $	Expenditure $
Albion-Fort Langley Ferry	*Nil*	1,881,909.69
Alert Bay Ferry	266,739.30	1,698,349.07
Arrow Park Ferry	*Nil*	91,048.61
Barkley Sound Ferry subsidy	*Nil*	81,000.00
Barnston Island Ferry	*Nil*	329,664.98
Big Bar Ferry	*Nil*	61,440.13
Castlegar Ferry	*Nil*	224,594.65
Clayhurst Ferry	*Nil*	284,591.29
Comox-Powell River Ferry	1,704,401.91	3,872,548.36
Cortes Island Ferry	108,288.65	1,221,367.07
Denman Island Ferry	220,601.10	1,202,196.79
Fort Nelson Hoverferry	*Nil*	298,967.69
Francois Lake Ferry	*Nil*	1,497,267.08
Gabriola Ferry	521,948.17	1,942,026.81
Glade Ferry	*Nil*	163,189.17
Harrop Ferry	*Nil*	209,941.58
Hornby Island Ferry	73,195.40	911,980.76
Isle Pierre Ferry	*Nil*	30,127.65
Kootenay Lake Ferry	*Nil*	1,597,940.79
Lasqueti Island Ferry subsidy	*Nil*	183,000.00
Little Fort Ferry	*Nil*	72,481.51
Lytton Ferry	*Nil*	164,801.91
Marguerite Ferry	*Nil*	91,940.34
McLure Ferry	*Nil*	59,188.76
Miscellaneous	*Nil*	69,533.22
Misty Islands Ferry subsidy	*Nil*	33,000.00
Needles-Fauquier Ferry	*Nil*	910,908.97
Newcastle Island Ferry subsidy	*Nil*	19,077.32
North Bend Ferry	*Nil*	265,000.00
Prince Rupert Ferry subsidy (Dodge Cove)	*Nil*	15,960.00
Quadra Island Ferry	410,380.70	1,959,680.93
Queen Charlotte Islands Ferry	123,461.20	1,097,415.94
Shuswap Lake Ferry subsidy	*Nil*	24,000.00
Sunshine Bay Drydock	*Nil*	7,831.49
Texada Island Ferry	201,474.90	2,114,480.73
Thetis Island Ferry	108,643.50	1,058,709.77
Upper Arrow Lakes Ferry	*Nil*	1,343,053.79
Usk Ferry	*Nil*	103,665.45
Woodfibre Ferry	20,907.00	941,573.82
TOTALS	$3,760,041.83	$28,135,456.12

STATEMENT OF VALUE OF INTRA-MINISTRY USAGE BY HIGHWAY DISTRICT AND BRANCH FISCAL YEAR 1981–82

Highway District and Branch	Value of Usage of Ministry Owned Equipment	Value of Usage of Crush, Mix and Guardrail
	$	$
Burns Lake	1,102,579.46	161,537.00
Chilliwack	2,210,921.00	212,929.00
Courtenay	1,638,508.00	282,829.00
Cranbrook	947,549.00	147,518.00
Creston	919,056.96	264,056.00
Dawson Creek	1,986,412.00	448,522.00
Dease Lake	1,324,877.00	189,321.00
Fernie	824,625.00	142,131.00
Fort St. John	2,031,872.00	271,048.00
Golden	1,026,100.00	218,683.00
Gibsons	541,165.98	90,169.00
Grand Forks	973,749.22	174,406.00
Kamloops	1,535,387.00	321,394.04
Kelowna	907,306.00	97,756.00
Lillooet	1,142,269.00	350,945.00
Merritt	1,111,028.00	334,154.00
McBride	1,162,161.00	329,965.00
Nanaimo	1,246,706.00	216,440.00
Nelson	1,117,177.08	261,809.00
New Denver	1,179,515.00	328,472.00
New Westminster	1,567,603.00	48,579.00
Centreline Marking	401,532.00	*Nil*
Dock District	683,070.00	*Nil*
Electrical Maintenance	451,972.00	*Nil*
North Vancouver	1,306,621.65	317,158.00
Patrol	183,224.15	*Nil*
100 Mile House	1,078,404.00	331,092.00
Penticton	1,167,927.00	267,464.00
Port Alberni	1,048,367.05	144,079.00
Prince George	2,076,727.00	211,134.00
Prince Rupert	1,075,585.00	110,370.00
Quesnel	1,988,337.00	115,724.00
Revelstoke	1,117,821.00	164,397.00
Rossland	913,557.67	198,361.00
Saanich	1,356,299.00	142,733.00
Salmon Arm	1,417,945.00	180,033.00
Smithers	1,063,531.88	253,117.00
Terrace	927,747.00	96,475.00
Vanderhoof	1,389,185.00	87,856.00
Vernon	1,028,971.00	68,080.00
Williams Lake	1,831,095.00	371,526.00
Region 6 Ferry District	47,969.00	*Nil*
Region/District 1	556,688.47	*Nil*
Region/District 2	618,662.00	*Nil*
Region/District 3	708,481.79	70,791.00
Region/District 4	1,002,587.00	54,723.00
Region/District 5	116,024.00	*Nil*
Region/District 6	292,109.00	*Nil*
Headquarters—		
Bridge Engineering Branch	291,651.00	*Nil*
Construction Branch	1,156,281.00	*Nil*
Design & Survey Branch	443,084.00	*Nil*
Equipment Services Branch	162,098.00	*Nil*
Financial Services Branch	384,074.00	*Nil*
Geotechnical & Materials Testing Branch	1,534,736.00	*Nil*
Maintenance Services	992.00	*Nil*
Paving Branch	1,704,417.00	*Nil*
Planning Branch	12,746.00	*Nil*
Traffic Engineering Branch	52,263.00	*Nil*
TOTALS	58,089,350.36	8,077,776.04

STATEMENT OF EXPENDITURE BY HIGHWAY DISTRICT (INCLUDING HEADQUARTERS), FISCAL YEAR 1981/82

VOTE 192 HIGHWAY MAINTENANCE

Highway District	Roads	Snow Removal	Bridges	Ferries	Machinery	Total
	$	$	$	$	$	$
Region/District 1—Burnaby	1,858,754.61		595,686.77			2,454,441.38
North Vancouver	2,749,201.73	1,044,238.00	223,855.10	941,573.82		4,958,868.65
Gibsons	1,423,761.49	243,233.00	61,938.19			1,728,932.68
Patrol	796,995.55					796,995.55
New Westminster	5,282,095.06	523,199.00	389,160.26	2,211,574.67		8,406,028.99
Chilliwack	3,972,571.81	2,295,925.00	298,788.74	265,000.00		6,832,285.55
Dock	1,088,951.87 cr.					1,088,951.87 cr.
Electrical Maintenance	1,936,758.96					1,936,758.96
Centreline Marking	4,229,835.81					4,229,835.81
Region/District 2—Kamloops	2,580,158.22		436,445.57			3,016,603.79
Kamloops	2,904,366.48	1,863,748.00	166,047.69	131,670.27		5,065,832.44
Salmon Arm	2,233,224.79	1,387,223.00	217,184.55	24,000.00		3,861,632.34
Vernon	1,956,862.33	1,089,122.00	85,013.06			3,130,997.39
Penticton	2,576,625.76	1,119,740.00	160,485.76			3,856,851.52
Merritt	2,424,827.72	880,196.00	122,508.89	164,801.91		3,592,334.52
Lillooet	2,262,182.22	972,488.00	186,108.72			3,420,778.94
100 Mile House	2,606,034.15	1,121,329.00	84,197.74	61,440.13		3,873,001.02
Kelowna	1,789,739.40	1,019,939.00	134,734.80			2,944,413.20
Region/District 3—Nelson	1,691,808.40		170,867.11			1,862,675.51
Nelson	1,739,021.25	1,300,247.00	188,708.75	1,978,903.03		5,206,880.03
Rossland	1,365,516.92	1,205,054.00	50,741.09	224,594.65		2,845,906.66
Grand Forks	1,618,991.57	947,212.00	133,760.14			2,699,963.71
New Denver	1,673,806.35	1,000,602.00	144,741.11	1,001,957.58		3,821,107.04
Cranbrook	1,785,237.33	816,596.00	98,389.06			2,700,222.39
Fernie	1,156,061.39	620,509.00	84,968.46			1,861,538.85
Golden	1,880,650.71	969,288.00	138,930.55			2,988,869.26
Revelstoke	1,878,136.38	1,320,651.00	116,000.00	1,343,053.79		4,657,841.17
Creston	1,535,983.08	906,406.00	102,144.30			2,544,533.38
Region/District 4—Prince George	2,127,445.29		47,154.31			2,174,599.60
Prince George	2,606,040.47	3,017,579.00	405,018.09	30,127.65		6,058,765.21
Quesnel	3,129,925.61	1,867,297.00	200,583.53	91,940.34		5,289,746.48
Dawson Creek	2,863,929.46	2,531,121.00	220,537.07	284,591.29		5,900,178.82
Fort St. John	3,152,026.19	1,930,253.00	235,852.60	298,967.69		5,617,099.48
Vanderhoof	2,176,742.23	1,271,549.00	161,882.83			3,610,174.06
McBride	1,442,641.04	1,409,603.00	88,121.83			2,940,365.87
Williams Lake	3,565,835.06	1,581,405.00	339,761.88			5,487,001.94
Region/District 5—Terrace	1,320,591.06		112,658.32			1,433,249.38

STATEMENT OF EXPENDITURE BY HIGHWAY DISTRICT (INCLUDING HEADQUARTERS), FISCAL YEAR 1981/82
VOTE 192 HIGHWAY MAINTENANCE—*Continued*

Highway District		Roads	Snow Removal	Bridges	Ferries	Machinery	Total
		$	$	$	$	$	$
Prince Rupert		2,404,054.42	1,147,866.00	247,399.96	1,146,375.94		4,945,696.32
Terrace		2,222,546.92	1,081,232.00	177,564.76	103,665.45		3,585,009.13
Dease Lake		2,317,539.18	1,206,986.00	128,882.43			3,653,407.61
Smithers		2,096,061.73	1,140,676.00	120,145.76			3,356,883.49
Burns Lake		2,149,408.87	1,045,301.00	91,336.90	1,497,267.08		4,783,313.85
Region/District 6—Nanaimo		1,172,745.44		71,537.29			1,244,282.73
Nanaimo		3,068,658.34	653,880.00	187,955.46	19,077.32		3,929,571.12
Saanich		3,830,330.73	483,218.00	273,814.00			4,587,362.73
Port Alberni		2,600,390.38	635,549.00	153,891.20	264,000.00		3,653,830.58
Courtenay		3,477,124.07	1,323,470.00	332,021.72			5,132,615.79
Region 6 Ferry District					15,981,340.29		15,981,340.29
Roads Generally							
PROJECTS:	$						
E-0067—Traffic Branch (Hdq. operations)	516,212.74						
E-0068—Street Lighting and Traffic Signals	1,230,222.13						
F-0041—Leases and agreements	388,705.18						
F-0043—Taxes	12,956.03						
F-0044—Publicity	312,751.87						
F-0045—Legal expenses	1,501.80						
F-0046—Engineers-in-training	98,381.80						
F-0047—Sundry projects	213.00 cr.						
F-0048—Damage claims	250,815.33						
F-0049—Insurance-re trailer moves and household effects	30,825.00						
F-0051—Miscellaneous	86,054.52						
F-0052—Grants, engineering and dyking	25,508.38						
H-0060—Highway signs operations (financing)	317,352.85 cr.						
M-0042—Automatic signals, railway	432,393.02						
M-0053—Maintenance Management (Headquarters Operations)	3,873.01						
M-0055—Avalanche control	313,324.79						
M-0056—Scenic Highway Act	2,617.60						
O-0062—Planning Branch (Hdq. Operations)	521,656.37						
Crushing operations	5,586,716.84						
Guardrail manufacture and purchases	1,225,998.47						
Mixing operations	2,710,840.52						
Intra-Ministry material use credits	8,077,776.04 cr.	5,356,013.51					5,356,013.51

Bridges Generally							
B-0058—Bridge damage	9,126.95						
B-0059—Bailey bridges	585,956.49			595,083.44			595,083.44
Ferries Generally							
H-0061—Ferries generally					69,533.22		69,533.22
Machinery Generally							
H-0063—Machinery (Hdq. maintenance and operations generally)	1,949,751.68						
H-0064—Autoplan insurance	1,193,096.42						
H-0065—Radio-telephone maintenance	906,694.53						
H-0066—Machinery replacement	11,940,417.62						
Machinery maintenance and operation—Districts	39,483,291.21						
Intra-Ministry equipment rental credits	58,089,350.36cr					2,616,098.90cr	2,616,098.90cr
		111,900,307.60	44,973,930.00	8,582,609.79	28,135,456.12	2,616,098.90cr	190,976,204.61

SUMMARY OF CAPITAL AND MAINTENANCE EXPENDITURES FOR ROADS, BRIDGES, FERRIES, LEGAL SURVEYS, RIGHTS-OF-WAY, HARDSURFACING, ETC. FOR THE FISCAL YEAR 1981–82

(FOR DETAILS SEE FOLLOWING SCHEDULES BY ELECTORAL DISTRICTS)

Electoral Districts	Vote 193	Bill 7	Vote 194	Total Capital	Maintenance	Total
	$	$	$	$	$	$
Alberni	801,705.46			801,705.46	2,097,028.97	2,898,734.43
Atlin	9,803,244.80			9,803,244.80	5,616,819.96	15,420,064.76
Boundary-Similkameen	3,870,842.51			3,870,842.51	5,810,055.39	9,680,897.90
Burnaby-Edmonds	186,499.87	60,073.78		246,573.65	2,170,883.12	2,417,456.77
Burnaby North	257,457.85			257,457.85	168,537.75	425,995.60
Burnaby-Willingdon	2,970,710.01			2,970,710.01	176,235.82	3,146,945.83
Cariboo	16,267,958.70			16,267,958.70	14,231,617.81	30,499,576.51
Central Fraser Valley	444,727.17			444,727.17	602,104.91	1,046,832.08
Chilliwack	1,205,140.68			1,205,140.68	1,422,175.64	2,627,316.32
Columbia River	1,541,159.07			1,541,159.07	4,266,675.63	5,807,834.70
Comox	11,929,188.54			11,929,188.54	7,383,084.50	19,312,273.04
Coquitlam-Moody	5,885,630.81			5,885,630.81	355,740.87	6,241,371.68
Cowichan-Malahat	3,391,621.04			3,391,621.04	3,250,980.26	6,642,601.30
Delta	3,502,803.02	17,904,862.20		21,407,665.22	970,627.19	22,378,292.41
Dewdney	6,995,658.43			6,995,658.43	2,779,692.23	9,775,350.66
Esquimalt-Port Renfrew	1,225,265.86			1,225,265.86	1,982,294.02	3,207,559.88
Kamloops	10,511,214.72			10,511,214.72	8,692,867.13	19,204,081.85
Kootenay	3,402,452.30			3,402,452.30	3,283,954.87	6,686,407.17
Langley	241,265.51			241,265.51	1,494,554.84	1,735,820.35
Mackenzie	5,398,271.32			5,398,271.32	6,010,942.52	11,409,213.84
Maillardville-Coquitlam	357,534.08			357,534.08	189,689.68	547,223.76
Nanaimo	14,006,386.48			14,006,386.48	5,154,925.96	19,161,312.44
Nelson-Creston	5,671,801.76			5,671,801.76	11,625,123.24	17,296,925.00
New Westminster	230,648.56	3,743,517.19		3,974,165.75	84,960.92	4,059,126.67
North Island	6,526,671.40			6,526,671.40	8,117,132.95	14,643,804.35
North Peace River	12,273,466.08			12,273,466.08	5,617,099.48	17,890,565.56
North Vancouver-Capilano	185,545.43			185,545.43	588,420.14	773,965.57
North Vancouver-Seymour	1,335,307.16			1,335,307.16	641,244.87	1,976,552.03
Oak Bay-Gordon Head	52,710.25			52,710.25	2,730.00	55,440.25
Okanagan North	4,713,526.69			4,713,526.69	4,638,776.15	9,352,302.84
Okanagan South	9,654,291.07			9,654,291.07	2,261,711.86	11,916,002.93
Omineca	10,929,321.82			10,929,321.82	8,933,456.93	19,862,778.75
Prince George North	10,414,299.47			10,414,299.47	2,429,588.84	12,843,888.31
Prince George South	7,173,437.36			7,173,437.36	8,552,448.71	15,725,886.07
Prince Rupert	5,807,132.42			5,807,132.42	3,120,408.56	8,927,540.98
Richmond	2,524,496.10	143,433.06		2,667,929.16	1,360,590.83	4,028,519.99
Rossland-Trail	5,852,047.96			5,852,047.96	2,845,906.66	8,697,954.62
Saanich and the Islands	1,689,927.79			1,689,927.79	2,715,512.08	4,405,439.87
Shuswap-Revelstoke	7,562,253.33		32,243,882.26	39,806,135.59	9,319,390.52	49,125,526.11
Skeena	13,378,098.27			13,378,098.27	7,697,048.39	21,075,146.66
South Peace River	19,672,157.15			19,672,157.15	5,900,178.82	25,572,335.97
Surrey	1,148,103.39			1,148,103.39	1,918,682.29	3,066,785.68
Vancouver Centre					316,783.84	316,783.84
Vancouver East	111,952.22			111,952.22	180,821.61	292,773.83
Vancouver-Little Mountain						
Vancouver-Point Grey	1,658,892.99			1,658,892.99	166,652.77	1,825,545.76
Vancouver South	24,999.99			24,999.99	102,814.80	127,814.79
Victoria	6,422.61			6,422.61		6,422.61
West Vancouver-Howe Sound	13,004,222.92			13,004,222.92	3,944,417.76	16,948,640.68
Yale-Lillooet	16,184,757.41			16,184,757.41	11,300,638.35	27,485,395.76
Planning and Engineering, general	23,276,037.67			23,276,037.67	8,482,174.17	31,758,211.84
	285,259,267.50	21,851,886.23	32,243,882.26	339,355,035.99	190,976,204.61	530,331,240.60

HEADQUARTERS

	$	$
HIGHWAY MAINTENANCE		
Roads Generally		
Project E-0067—Traffic Branch (Headquarters Operations)	516,212.74	
E-0068—Street lighting and traffic signals	1,230,222.13	
F-0041—Leases and agreements	388,705.18	
F-0043—Taxes	12,956.03	
F-0044—Publicity	312,751.87	
F-0045—Legal expenses	1,501.80	
F-0046—Engineers-in-training	98,381.80	
F-0047—Sundry projects	213.00 cr.	
F-0048—Damage claims	250,815.33	
F-0049—Insurance re trailer moves and household effects	30,825.00	
F-0051—Miscellaneous	86,054.52	
F-0052—Grants, engineering and dyking	25,508.38	
H-0060—Highway signs operation (financing)	317,352.85 cr.	
M-0042—Automatic signals, railway	432,393.02	
M-0053 —Maintenance Management (Headquarters Operations)	3,873.01	
M-0055—Avalanche control	313,324.79	
M-0056—Scenic Highway Act	2,617.60	
O-0062—Planning Branch (Headquarters Operations)	521,656.37	
Centreline marking	4,229,835.81	
Dock District (uncleared B.C. Ferry Corporation charges and other minor undistributed items)	1,088,951.87 cr.	
Electrical maintenance generally	1,936,758.96	
Crushing operations	5,586,716.84	
Guardrail manufacture and purchases	1,225,998.47	
Mixing Operations	2,710,840.52	
Intra-ministry material use credits	8,077,776.04 cr.	10,433,656.41
BRIDGES GENERALLY		
Project B-0058—Bridge damage	9,126.95	
B-0059—Bailey bridges	585,956.49	595,083.44
FERRIES GENERALLY		
Project H-0061—Ferries generally		69,533.22
MACHINERY GENERALLY		
Project H-0063—Machinery (Headquarters Maintenance and Operations generally)	1,949,751.68	
H-0064—Autoplan insurance	1,193,096.42	
H-0065—Radio-telephone maintenance	906,694.53	
H-0066—Machinery replacement	11,940,417.62	
Machinery maintenance and operation—Districts	39,483,291.21	
Intra-Ministry equipment rental credits	58,089,350.36 cr.	2,616,098.90 cr.
HIGHWAY CONSTRUCTION—CAPITAL		
Roads		
Construction Branch		
Project C-0089—Construction generally	940,610.75	
C-0090—Construction overhead	266,022.57	
C-1623 —Highway 23 Revelstoke–Mica relocation, B.C. Hydro and Power Authority recovery account (to clear off Vote 194 and effect full recovery to Vote 194 in 1981/82)	347,363.27	1,553,996.59

HEADQUARTERS—*Continued*

	$	$	$
Highway Safety Branch			
Project C-0202—Roadside hazard elimination, installation of frangible lamp standard bases		11,795.00	
C-0207—Highway safety measures, kilometre reference marker project		131.52	
C-0208—Highway safety measures, road safety education		1,394.23	
C-0209—Highway safety measures, general expenses		35,705.93	49,026.68
Traffic Branch			
Project E-0003—Signs, signals and traffic control			1,674,690.02
Roadside Development and Landscape Branch			
Project D-0004—Roadside development, Headquarters research and general expenses		55,175.50	
D-0006—Arterial Highway beautification, Community Participation Program		9,444.80	
D-1047—Bear-proof litter containers, manufacture and supply		1,778.17	66,398.47
Bridges and Ferry Landings			
Bridge Branch			
Project B-0022—Bridge steel		310,312.79	
B-0281—Bridge design and engineering services		1,376,881.17	
B-0739—Bridge redecking, Trans-Canada Highway and general highways		1,169,924.65	2,857,118.61
Paving Branch			
Project S-0084—Miscellaneous surface seals		191,561.22	
S-0085—Miscellaneous drum mix paving		140,192.38 cr.	
S-0086—Paving generally		1,199,851.77	
S-0087—Surveys and investigations		1,479,986.86	2,731,207.47
Municipal Programs Branch			
Project O-1037—Ministry signing of Secondary Highways Capital Construction work			11,664.00
Design and Survey Branch			
Surveys Generally—			
Project L-0101—Metric Conversion expenses	87.27		
Staff training expenses	3,633.14		
Surveys generally	1,707,088.57	1,710,808.98	
L-0111—Archaeological explorations		200,000.00	1,910,808.98
Geotechnical and Materials Branch			
Project G-0107—Geotechnical and materials testing			8,382,391.64
Equipment Services Branch			
Project H-0088—Scientific and technical equipment		603,577.36	
H-0112—Radio-telephone installations—Capital		733,729.77	
H-0115—Equipment and machinery—capital purchases		2,701,428.08	4,038,735.21
Total, Headquarters			31,758,211.84

ALBERNI DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,539,691.13
Snow removal			376,308.56
Maintenance of bridges			100,029.28
Maintenance and operation of ferries—Barkley Sound Ferry Subsidy			81,000.00
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		4,390.69	
C-0154—Minor betterments, miscellaneous		98,117.11	
C-0542—Beaver Creek Road 1, construct and pave bridge approaches		149,612.44	
C-0667—Highway 4 Taylor River to Ucluelet, construction of passing lanes		186,472.44	
D-0770—Taylor River, Port Alberni, rest area upgrading		25,556.50	
N-0397—Guardrail installation		38,735.34	502,884.52
Construction Branch			
Project C-1180—Bamfield Access Road, Alberni, Construction due to washout		39,444.50	
C-3989—Forest Road, Port Alberni to Cumberland Road (see also Comox)		2,537.56	41,982.06
Highway Safety Branch			
Project C-0202—Roadside hazard elimination, guardrail placement at intersection of Alberni–Tofino and Port Alberni Highways		3,967.00	
C-0204—School Route Improvements, footpath on Compton Road, Port Alberni		5,947.00	9,914.00
Traffic Branch			
Project E-1059—Route 4 at Helen Street, Port Alberni, (Johnston Road), signal installation			16,158.64
Bridges and Ferry Landings			
Day Labour			
Project B-1019—Deer Creek, Forester and Highway 4, bridge decks			80,799.59
Paving Branch			
Project S-0647—Highway 4, Alberni–Ucluelet, intermittent recap			80,721.22
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Canadian Highway 4, West Boundary Lot 9 to Alberni Junction (see also Comox)		7,060.50	
Highway 4, Tebo Road to Cherry Creek Road		28,978.71	
Minor road surveys		740.29	
Qualicum Bypass, 4 lane		8,739.53	45,519.03
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Bamfield Road right of way through part of SW. ¼ Sec. 20 and NW. ¼ Sec. 17, Tp. 1, Barclay District		10,663.77	
Defining in DL 260, Alberni District, Bainbridge Gravel Pit (Franklin River Road)		1,000.00	
Highway 4 through DL's 34, 35, 52 and 84, Alberni District		7,971.03	
Island Highway, Shaw's Corner through Part of DL 81, Newcastle District		4,051.60	23,686.40
Property Services Branch			
Rights of way and Property Purchases			
Project P-0113—Bamfield Road			40.00
Total, Alberni District			2,898,734.43

ATLIN DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			3,355,070.62
Snow removal			2,029,555.81
Maintenance of bridges			232,193.53
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0147—Minor betterments, miscellaneous		28,099.76	
C-0148—Minor betterments, miscellaneous		4,289.20	
C-0149—Minor betterments—Dease Lake roads	136,000.23		
Miscellaneous	77,386.99	213,387.22	
C-0174—Highway 37 and 37A, Surprise Creek to Nass River, construction, 27 km		100,000.00	
C-0178—Highway 37, various sections, gravelling, strengthening and improve drainage		589,480.45	
C-0807—Greenville access, clearing and grubbing		326,267.99	
C-0885—Highway 37, Meziadin Junction, North 2.0 km, reconstruction		555,751.40	
C-0887—Highway 37, Twin Lakes to Pinetree Lake and Dease Lake to Tanzilla River, graded aggregate seal preparation		307,262.50	
C-0888—Atlin Highway 2, various sections, ditch, construct and regravel		102,766.04	
C-1131—Highway 37, Stikine North, slide repairs		80,000.00	
D-0962—Balsat River, new rest area		4,858.00	
D-0963—Nass River, new rest area		2,245.00	
D-0964—Bell-Irving 1, new rest area		7,400.00	
D-4277—Highway 37, Kitwanga Highway extension, new rest area development, 2 sites (see also Skeena)		10,137.50	
N-0390—Guardrail installation		40,138.03	2,372,083.09
Construction Branch			
Project C-2690—Highway 37, Stewart–Cassiar Highway, Pinetree Lake-Cassiar Junction (24.48 miles)		11,520.04	
C-2702—Kitwanga–Meziadin Lake Highway, Nass River Bridge to DL 3411, (Northern Development Package)		48,764.64	
C-3321—Highway 37, Derrick Creek to DL 3411, Kitwanga to Meziadin Lake, reconstruction		260,134.40	
C-3913—Cassiar Highway 37, DL 1879 to Cranberry Bridge 1, construction (11.41 miles)		1,880,793.07	2,201,212.15
Bridges and Ferry Landings			
Day Labour			
Project B-1024—Thomas and Oweegee Bridges			1,271.60
Bridge Branch			
Project B-0557—Highway 37A, Bear River Bridge 1, 409		1,044,384.25	
B-1102—Greenville Bridge over Nass River		83,153.85	1,127,538.10
Paving Branch			
Project S-0084—Miscellaneous surface seals, road graded seal, Highway 37, Dease Lake, Tanzilla River Road and Boulder Road	522,701.03		
Road graded seal, Pinetree Lake–Deep Creek (Cassiar Junction)	1,281,129.42	1,803,830.45	
S-5102—Highway 37, Derrick Creek to Nass River (62.0 km)		2,066,548.12	3,870,378.57
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Aiyansh Junction–Greenville		104,775.46	
Highway 37, Dease Lake–Sawmill Point		118,306.18	
Miscellaneous, from Alice Arm to Molybdenum Townsite		195.77	
Stewart to Cassiar site plans for miscellaneous bridges on Stewart-Cassiar Highway		7,483.88	230,761.29
Total, Atlin District			15,420,064.76

BOUNDARY-SIMILKAMEEN DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			3,680,391.79
Snow removal			1,857,859.88
Maintenance of bridges			271,803.72
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0019—28 Gilpin Road, reconstruct and gravel		4,768.99	
C-0126—Minor betterments, Apex flood repairs	62,151.00		
Miscellaneous	196,485.56	258,636.56	
C-0130—Minor betterments, miscellaneous		22,101.60	
C-0133—Minor betterments, miscellaneous		157,100.00	
C-0473—Keremeos area, miscellaneous roads, upgrading		49,086.24	
C-0474—Oliver area, miscellaneous roads, upgrading		66,109.65	
C-0475—Princeton-Summerland Road 90, construction		148,978.01	
C-0821—Penticton area, miscellaneous roads, upgrading		76,163.85	
C-0838—Highway 33, Westbridge–McCulloch junction, construction		200,000.00	
C-3660—Highway 97, Kruger Hill, construction truck lane		80,359.53	
C-3666—Highway 33, Rock Creek–Kelowna, reconstruct and pave		383,993.00	
C-4165—Highway 97, Westbank–Summerland, improvements (see also Okanagan South)		29,781.01	
D-0952—Highway 3, Wilgress Lake rest area, upgrading		9,621.55	
D-0955—Highway 3, Lafferty rest area, upgrading		8,500.00	
N-0376—Guardrail installation		6,000.00	
N-0377—Guardrail installation		67,719.57	
N-0383—Guardrail installation		56,684.23	
W-0348—Fencing Schedule 2 Highways		48,339.91	
W-0352—Fencing Schedule 2 Highways		25,000.00	1,698,943.70
Traffic Branch			
Project E-0607—Route 97 at Green and Brandon Penticton, signal and lighting installation		18,537.35	
E-0756—Christina Lake, lighting installation, 1. Route 3 at Christina Lake West Road, 2. Route 3 at Alpine-Texas Point Road		11,924.22	
E-0972—Route 97 at Airport Road, Penticton, traffic signal installation		13,340.55	43,802.12
Bridges and Ferry Landings			
Day Labour			
Project B-0996—Harper Bridge		14,854.05	
B-1029—McAlpine Bridge		62,149.16	77,003.21
Bridge Branch			
Project B-0573—Westbridge Bridge, Rock Creek, to Kelowna Highway 33, sidewalk addition			58,605.99
Paving Branch			
Project S-0084—Miscellaneous Surface Seals—			
Road chip seal: Penticton: Princeton–Sterling Creek Bridge (38 km)	87.98		
Road graded seal: Christina Lake area (double coat)	135.06		
Road graded seal: Christina Lake–Paulson Bridge	135.06		
Road graded seal: Grand Forks miscellaneous roads	262.56		
Road graded seal: Grand Forks–Christina Lake area	135.06		
Road graded seal: Greenwood area, 21 km	467.20		
Road graded seal: Highway 3, Paulson Bridge, 15 km southward	44.36		
Road graded seal: miscellaneous highways, Keremeos–Cawston area, 25.0 km	191,304.14		
Road graded seal: miscellaneous roads, Okanagan Falls, Oliver and Osoyoos areas	5,949.13	198,520.55	
S-0085—Miscellaneous drum mix paving—			
33 Rock Creek, 11.5 km	430,765.43		
Copper Mountain Road, Penticton	1,612.10	432,377.53	630,898.08

BOUNDARY-SIMILKAMEEN DISTRICT—*Continued*

	$	$	$
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0701—264B, 89th Street and 64th Avenue, Village of Osoyoos		41,000.00	
V-1176—273B, South Main Street and Lakeside Drive, City of Penticton		49,677.72	
V-1178—135B, Naramata Road, City of Penticton		50,000.00	140,677.72
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Keremeos By-pass, Seventh Street extension		15.90	
Keremeos Creek Road, Twin Lake Golf Club		2,720.00	
Minor road surveys		70,133.65	
Penticton Channel Parkway		336,542.93	
Penticton, Main Street curb and gutter		1,202.56	
Southern Trans-Provincial Highway, Hedley to Keremeos		40.00	410,655.04
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Christian Valley Road 43, N. bdy. DL 572 to W. bdy. DL 1904, SDYD, and plan of subdivision in DL 1904, Bosovich gravel pit		2,737.37	
E. bdy. Indian Reserve 9, (Alexis Creek) to E. bdy. L 565		7,788.97	
Granby Road 32, S. bdy. L 2700 to N. bdy. L 3233, SDYD		4,553.36	
Replacement of and control ties for integrated survey monuments on Penticton Channel Parkway, Okanagan Highway		519.00	
Southern Trans-Provincial Highway 3, Hedley-Keremeos, S. bdy. L 3207 to S. bdy. L 3202		10,872.00	
Southern Trans-Provincial Highway 3 through DL's 233^{s} and 3202		8,637.88	
Southern Trans-Provincial Highway right of way, widening through parts of District Lots 351, 453, 520, 653, and 750 SDYD		2,841.17	
Southern Trans-Provincial Highway, widening in Lot 1, Plan 15834, DL 34, SDYD, Dist. Plan 4D3-3		744.30	
Sutherland Creek Road 40, in Plan B 1675, DL 2806, SDYD, 0.6 km		2,892.11	41,586.16
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Brown Creek Road North 155		1.00	
Crowsnest Highway 3 (Sion Frontage Road 127-4)		2,471.00	
Gilpin Road		25,703.64	
Green Mountain Road 78		2,645.67	
Highway 3, Hedley to Keremeos		1,783.36	
Highway 3A, Kaleden Junction to Twin Lakes Junction		70.70	
Highway 97, McAlpine Bridge-Vasseaux Lake		113,399.62	
Highway 97, Okanagan Falls		153,340.50	
Hulme Creek Road 217		4.00	
Kelly Road 211		4,121.00	
Madge Road		4.00	
Martin Street—Main Street, Pentiction, reconstruction		195.20	
Max Lake Road		2.00	
Okanagan Highway 97 at Oliver		4,339.12	
Osoyoos Indian Reserve 1, also known as Inkaneep Indian Reserve		2,393.22	
Penticton Channel Parkway		306,034.46	
Rock Creek-Bridesville Road 65		1,190.00	
Son Ranch Road 209 and Dondale Road 210		972.00	
Southern Trans-Provincial Highway 3, Copper Mountain		150,000.00	768,670.49
Total, Boundary-Similkameen District			9,680,897.90

ADMINISTRATION AND SERVICES DEPARTMENT

BURNABY-EDMONDS DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,133,094.62
Snow removal			28,932.90
Maintenance of bridges			8,855.60
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		5,482.07	
C-0122—Minor betterments, miscellaneous		4,319.78	
C-0488—Canada Way at Burris intersection, improvements		80,000.00	89,801.85
Construction Branch			
Project C-1121—Marine Way, Byrne Road to north end of Queensborough Bridge, grade construction (see also New Westminster)			4,878.18
Traffic Branch			
Project E-0653—Route 1A, 12th Street at 10th Avenue, Burnaby, signal installation			17,824.76
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0741—14B, North Road (west half), District of Burnaby (see also Burnaby North)			42,650.09
Design and Survey Branch			
Surveys Generally—Project L-0101—			
From Edmonds Street to 10th Avenue for new curb and gutter construction		18,693.97	
Old Trans-Canada Highway (Kingsway Highway) from Boundary Road to 10th Avenue		6.02	18,699.99
Bill 7			
Project L-0558—Fraser River Crossing, Byrne to Queensborough Bridge			60,073.78
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Right of way plan in Lots 146A and 147, Plan 719, DL 1035, SDYD, Juniper Avenue, Kaleden			645.00
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Gaglardi Way			12,000.00
Total, Burnaby-Edmonds District			2,417,456.77

BURNABY NORTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			150,979.48
Snow removal			15,957.57
Maintenance of bridges			1,600.70
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		42,814.20	
C-0801—Route 7A, Kask Bros. to Union Street, recap		100,000.00	142,814.20
Traffic Branch			
Project E-0574—Route 7 at Gilmore Avenue, Burnaby, signal and lighting revision			52,893.32
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0741—14B, North Road (west half), District of Burnaby (see also Burnaby-Edmonds)			42,650.09
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Barnet Highway from Sperling Avenue to Clark Road (see also Coquitlam-Moody)		15,353.00	
Simon Fraser University access road		3,747.24	19,100.24
Total, Burnaby North District			425,995.60

BURNABY-WILLINGDON DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			156,137.63
Snow removal			16,009.89
Maintenance of bridges			4,088.30
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		26,347.55	
C-0122—Minor betterments, miscellaneous		4,319.77	
N-0370—Guardrail installation		12,784.00	43,451.32
Construction Branch			
Project C-3997—Boundary Road to Byrne Road, Marine Way			421,956.12
Traffic Branch			
Project E-0722—Route 1A (Kingsway) at McKay Avenue., Burnaby, signal and lighting installation			19,994.77
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Clydesdale Street and Highway 1		1.00	
Lougheed Highway		1.00	
Marine Way, Byrne to Queensborough Bridge		2,485,305.80	2,485,307.80
Total, Burnaby-Willingdon District			3,146,945.83

CARIBOO DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			9,106,084.05
Snow removal			4,415,021.55
Maintenance of bridges			557,131.74
Maintenance and operation of ferries			
Big Bar Ferry		61,440.13	
Marguerite Ferry		91,940.34	153,380.47
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0128—Minor betterments, miscellaneous		22,824.00	
C-0129—Minor betterments,			
100 Mile House	117,856.56		
Bridge Lake	69,116.22		
Clinton	60,916.50	247,889.28	
C-0141—Minor betterments, miscellaneous		248,061.90	
C-0146—Minor betterments, miscellaneous		211,677.57	
C-0172—Horsefly Road, reconstruction		193,984.99	
C-0272—Canim Lake Road and Hendrix Lake Road, prepare for paving		378,740.52	
C-0445—Miscellaneous school bus routes, Quesnel, upgrade and reconstruct		536,016.26	
C-0827—Clinton–Pavilion Road, reconstruct		390,576.30	
C-0828—Miscellaneous subdivision roads, 100 Mile House District, upgrade		31,512.10	
C-0863—Highway 97, Cuisson Creek, fill failure		50,913.24	
C-0864—Sales Road East, relocation		79,821.68	
C-0865—Highway 26, Cottonwood Bridge approaches, paving		200,072.55	
C-0866—Jack of Clubs Road, horizontal alignment improvement		149,870.07	
C-0867—Nazko Road, regravel and dust control		230,556.45	
C-0881—Highway 20, Indian Reserve to Alexis Creek, reconstruction		804,933.01	
C-0882—Dog Creek Road and miscellaneous roads, prepare for paving		354,916.45	
C-0883—Highway 20, miscellaneous gravelling (see also MacKenzie)		16,141.43	
C-0884—Horsefly and Likely Roads, preparation for paving		403,667.54	
C-1042—Highway 97 at Tatton Station Road, sight distance improvements		23,722.08	
C-1072—Chezacut Road, reconstruction		101,786.88	
C-1073—Route 97, Dragon Lake Hill, improvements		182,411.49	
C-4176—Highway 24, Bridge Lake to Little Fort, reconstruction		180,817.97	
C-4243—Chilcotin–Bella Coola Highway 20, relocate and construct at Bayliffe		22,604.62	
C-4244—Miscellaneous school bus and farm roads, Williams Lake, reconstruct and gravel (see also MacKenzie)		90,647.60	
C-4245—Dean River Road, reconstruct and gravel		59,913.68	
C-4499—Likely Road, improve sight distance and minor corner removal, km 55 to km 65		249,872.31	
D-0100—Highway 20, Anahim Lake to Williams Lake, hydroseeding highway right of way		161,843.13	
D-0945—Doman Gravel Pit, reclamation		15,478.00	
D-0949—Dela Forks, gravel pit reclamation		25,505.68	
D-0956—Highway 20, Lee's Corner, new rest area		5,647.31	
D-0957—Highway 20, 150 km west of Lee's Corner, new rest area		5,429.00	
D-0958—Two Mile Flat, Quesnel, 4-laning highway beautification		18,589.64	
N-0380—Guardrail installation		81,171.12	
N-0430—Guardrail installation		39,873.85	
N-0435—Guardrail installation		29,999.50	
N-1142—Likely Road, guardrail installation		17,883.00	
W-0351—Fencing, Schedule 2 Highways		37,156.36	
W-0357—Fencing, Schedule 2 Highways		64,132.27	
W-0362—Fencing, Schedule 2 Highways		69,541.91	6,036,202.74

CARIBOO DISTRICT—*Continued*

	$	$	$
Construction Branch			
Project C-3479—Morehead Lake Spillway, design and reconstruct		701.32	
C-4156—Barkerville, Highway 26, reconstruction, Mitchell Bridge elimination		233,189.42	233,890.74
Traffic Branch			
Project E-0619—Route 97, Rome Avenue to Route 26, Quesnel, signal and lighting installation		23,904.41	
E-0778—Route 97, Cottonwood River Bridge and approaches, lighting installation		23,139.60	
E-0973—Route 97, Dragon Hill, Quesnel, lighting installation		75,408.30	
E-1065—Route 97 at Carson Drive Sunset Drive, Williams Lake, signal installation and lighting		36,064.68	
E-1105—1. Route 97 at 1st Street, 100 Mile House. 2. Route 97 at 115 (Likely) Road, 150 Mile House, flashing beacon and lighting installations		4,406.65	162,923.64
Roadside Development and Landscape Branch			
Project D-4453—108 Mile, rest area development			48,457.88
Bridges and Ferry Landings			
Day Labour			
Project B-1003—Meadow Bank and Cinema Bridges		84,882.98	
B-1008—Courson Bridge		89,865.04	
B-1032—Yalakom and Baker Bridges (see also Yale-Lillooet)		69,354.60	
B-1033—Churn Creek and Bullock Bridges		16,900.17	261,002.79
Bridge Branch			
Project B-0001—Barkerville Highway, McLarry Bridge		469,500.20	
B-0536—Davie Street, Pedestrian Overpass, over B.C. Rail at Quesnel		102,480.91	
B-1115—Baker Creek Bridge, Marsh Drive, Quesnel		20,853.64	592,834.75
Paving Branch			
Project S-0084—Miscellaneous surface seal, 100 Mile: "N" Bonaparte River Bridge (38 km) (Loon Lake Road area) to "N" Clinton		77.66	
S-0085—Miscellaneous drum mix,			
100 Mile: Highway 83, Watch Lake Road (13.6 km)	155.32		
Chasm Road, 8.0 km	343,195.07		
Kelly Road, 18.0 km	557,167.94	900,518.33	
S-0278—Highway 97, Two Mile Flat, Quesnel, curb and gutter		829,421.89	
S-0644—Williams Lake, Horsefly and Likely areas		4,543,449.35	
S-1050—Miscellaneous, Williams Lake District, Dog Creek area		1,276,071.71	
S-2876—Chilcotin, Highway 20, Riske Creek Section		2,000.00cr.	7,547,538.94
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-1170—271B, Horse Lake Road, Village of 100 Mile House			3,322.27
Design and Survey Branch			
Surveys Generally—Project L-0101—			
13 km west of Kleena Kleene		11,145.43	
150 Mile House, curve realignment		13,615.89	
Cariboo Highway 97, Cache Creek-Loon Lake Road		3,267.39	
Cariboo Highway 97, 92 Mile House to 83 Mile House		44,471.13	
Clinton, underpass and approaches		42,536.67	
Dragon Lake, Quesnel		8,088.10	
Fox Mountain Road, Williams Lake		38,682.96	
Highway 20, Alexis Creek, Bull Canyon		91,336.68	
Lac Des Roches to 100 Mile House		872.00	
Little Fort-Lac Des Roches (see also Kamloops)		47,680.02	
Minor road surveys		40,018.50	
North Star Interchange, Quesnel		34,856.05	
Quesnel Bypass		2,743.96	
Weldwood Plant, access to relocation at slide		586.49	379,901.27

CARIBOO DISTRICT—*Continued*

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Legal Surveys Office			
Legal Surveys—Project L-0099—			
38 Pinnacles and 726 Hoodoo Roads through DL's 8651 and 8654		2,964.80	
Canim Lake Road and Exeter Truck Route through DL's 4174, 4175, 4179 and 33, C.D., 0.7 km		4,582.66	
Cariboo Highway 97 through Lot 24, Plan 6912, DL 385, Cariboo District		1,297.10	
Cariboo Highway 97, 141 Mile House Section through part of Secs. 1 and 11, Tp. 43, Cariboo, 2.5 km		4,248.86	
Cariboo Highway 97, widening in part of District Lot 7045, Cariboo District, Dwg. CG4-22-7 and 8		997.86	
Cariboo Highway and Finning Road, in part of District Lot 5012, Cariboo District		1,983.25	
Cariboo Highway widening in parts of DL's 385 and 346, Two Mile Flats, Quesnel		8,157.75	
Chilcotin–Bella Coola Highway 20, (Additional R/W for runaway lanes) through parts of Secs. 23, 26, 27, 38, Tp. 48, L.D. and DL 155, Cariboo		1,848.80	
Chilcotin–Bella Coola Highway 20, E. bdy. Sec. 25 to W. bdy. Sec. 19, Tp. 52, L.D., 11.5 km		24,360.48	
Chilcotin–Bella Coola Highway, Redstone Easterly Baliff Bypass, W. bdy., L 456 to E. bdy., DL 381, 10.4 km File: LS20-2-15		8,785.98	
Drainage easement right of way through part DL 7351 C.D.		632.25	
Drainage easement right of way, 133 Beach Crescent, Quesnel, in Lots 1 and 4, Plan 24763, DL 3971, C.D.		600.00	
Explanatory Plan through Lot 22, Plan 17200, DL 4541, Lillooet District, drainage easement, Green Lake		165.00	
Explanatory Plan through Lot 4, Block 4, DL 5037, Lillooet District-Fircrest Road, Plan 12042, Dist. Dwg. A-318		155.00	
Lots 15 and 16, DL 3140, Cariboo District, Plan 19032, File: LSR 4-42		285.00	
North Star Interchange and Highway 97, R/W in part of DL's 51 and 710, Cariboo District		857.50	
Reference Plan for part of NE. ¼ DL 4519, Cariboo District Plan 42-A975-99, Sales Gravel Pit		732.51	
Right of way survey of—1. 1127 Casselman Road through DL 45, 2. 600 Chilko–Newton Road through DL 456, File: LSR 4-47-15		10,381.58	
Road closure within DL 8077 Lillooet District, Cariboo Highway 97, Clinton–Maiden Creek, Section LTO, Plan H10420, Dwg. C. 123		610.90	
Statutory right of way for highway through part of DL 12508, Cariboo District 739 Pioneer Road Dwg. 42 A739-5, File: LSR 4-42		883.50	74,530.78

CARIBOO DISTRICT—*Continued*

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Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
103 Mile Lake Road 373		11,069.47	
629 Little Lake, Quesnel River Road		1,699.97	
791 Venture Road		1.00	
Abel Lake Road 412		1.00	
Ackerblade Road 100		2,587.50	
Adams Road 206		165.79	
Baker Creek		14,000.00	
Barkerville Highway 26		3,500.00	
Barkerville Road 26		1,012.00	
Boyko Road 914		2,975.00cr.	
Bunting Lake Road 446 and Bottle Creek Road 414		6,065.00	
Canim Lake South Road 729		4,850.00	
Cariboo Highway 97		8,417.60	
Cariboo Highway 97		2,598.00	
Cariboo Highway 97, Rowat Road to Goyette Road		1,934.11	
Cariboo Highway 97, Two Mile Flat, Quesnel		174,215.00	
Cariboo Highway Arterial, Front Street and Carson Avenue		21.71	
Cariboo Highway, North Star Road Interchange		337,180.44	
Casselman Road 1127		1,112.48	
Chilcotin–Bella Coola Highway 20		3,680.07	
Chilko–Newton Road 600		4,413.20	
Chimney Lake Road 610		8,672.03	
Dog Creek Road 137		4,151.96	
Exeter Truck Route 555		7,000.00	
Fox Mountain Road 381		520.00	
Fraser Road 32		13,815.00	
Gasoff Road 62		215,748.28	
Gravel Pits		143.67	
Gunner Road 188		350.00	
Highway 24—93 mile to Little Fort		17,521.00	
Horse Lake Road		1,950.00	
Houseman Road 346		5,716.00	
Hydraulic Road 60		636.80	
Lepetich Road 184		2,252.00	
Likely Road 115		31,178.09	
Lily Pad Lake Road 376		8,600.00	
Lindstrom Road 818		781.00	
Lucas West Road 833		346.20	
Machete Lake Road 413		200.00	
Marguerite Ferry West Road 2		10.58	
Merz Road 233		5,995.00	
North Bonaparte Road 386		18,935.50	
Park Drive Road 1057		1,000.00	
Patchett Road 53		4.00	
Pinnacles Road 38		648.00	
Pinnacles Subdivision Road 840		1.00	
Road 283		1.00	
Skyline Road 235		1,043.45	
Spokin Lake Road 398		878.00	
Tanner Road		1.00	
Tatton Station Road		2,500.00	
Valhalla Road 697		1,200.00	
Zschiedrich Road 24		4.00	927,352.90
Total Cariboo District			30,499,576.51

CENTRAL FRASER VALLEY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			393,495.42
Snow removal			167,329.46
Maintenance of bridges			41,280.03
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour—			
Project C-0120—Minor betterments, miscellaneous		31,996.00	
C-0122—Minor betterments, miscellaneous		3,748.56	
W-0792—Fencing Schedule 2 Highways		70,000.00	105,744.56
Traffic Branch			
Project E-0670—Essendene Avenue at Montrose Street, Abbotsford, signal replacement		17,203.99	
E-1141—Route 11 at Clayburn, Matsqui, Route 7 at Hawkins Pickle Road, Dewdney, flashing beacon and lighting installation (see also Dewdney)		1,918.92	19,122.91
Roadside Development and Landscape Branch			
Project D-3714—Trans-Canada Highway, Abbotsford (Bradner Road), rest area development, septic facilities, water supply and landscaping		17,781.90	
D-3716—Cole Road rest area, landscape development		109,403.20	127,185.10
Bridges and Ferry Landings			
Bridge Branch			
Project B-1053—Peardonville Road underpass over Trans-Canada Highway at Clearbrook, replacement of damaged girder			51,744.22
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0712—186B, South Fraser Way, District of Matsqui			9,000.00
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Highway 11, Abbotsford–Mission mapping (see also Dewdney)			351.93
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Plan of statutory right of way for highway over remainder Lot 2, Plan 453 and Lot 29, Plan 33605, NW. ¼ Sec. 15, Tp. 16, NWD, Abbotsford–Mission, Highway 11		427.45	
Abbotsford–Mission, Highway 11 at Fraser Way through remainder Ref. Plan 7360, NE. ¼, Sec. 15, Tp. 16, NWD, File LS 11 S/L		1,250.00	1,677.45
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Gravel pits		1.00	
Abbotsford–Mission bypass		79,900.00	
Mission Bridge south approach		50,000.00	129,901.00
Total, Central Fraser Valley District			1,046,832.08

CHILLIWACK DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			939,106.91
Snow removal			402,474.40
Maintenance of bridges			80,594.33
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0120—Minor betterments, miscellaneous		133,297.00	
C-0156—Hemlock Valley Road, widen, gravel and drainage		200,000.00	
C-0804—Rockwell Drive, Greenpoint North, reconstruct		90,000.00	
C-0806—Miscellaneous Pavement patching, Chilliwack (see also Dewdney and Yale-Lillooet)		26,640.01	
C-3774—Chilliwack Lake Road, reconstruct, gravel, widen and prepare new alignment		130,000.00	
D-1043—Agassiz Mountain Rest Area, paving parking areas, installation of tables and toilets, landscaping		30,000.00	
W-0792—Fencing Schedule 2 Highways		10,000.00	619,937.01
Traffic Branch			
Project E-0740—Route 1A at 200th Street, Langley, traffic signal and lighting installation		7,829.40	
E-1106—Route 9, Evergreen Drive and Cheam Avenue, Agassiz, lighting installation		25,908.41	33,737.81
Roadside Development and Landscape Branch			
Project D-1126—B.C. Hydro Supply to Johnson Slough Rest Area			10,565.00
Bridges and Ferry Landings			
Day Labour			
Project B-1014—Frost Creek Bridge, reconstruct			90,000.00
Paving Branch			
Project S-0652—Schedule I, Evergreen Drive and Cheam Avenue, Agassiz (0.542 km), Schedule II: Highway 9, North of Agassiz, Rosedale Bridge (1.1 km), Schedule III: Highway 1 and miscellaneous street in Yale (4.03 km) (see also Yale-Lillooet)			359,010.05
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Cheam Street in Agassiz curb and gutter Pioneer to Highway 9		1,455.25	
Minor road surveys		1,829.02	
Prest Road overpass to Interchange 9		1,410.65	
Sumas Peak		1,765.40	
Trans-Canada Highway, Gibson Road and Annis Road (underpasses)		7,068.00	
Trans-Canada Highway, Vedder Road Interchange		2,229.00	
Weigh Scale (McElwee Road)		6,263.37	22,020.69
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Explanatory plan through Lot 29 Plan 52537 in NW. ¼ Sec. 6, Tp. 3, R. 28, W6M, Dyer Road 218		200.00	
Highway 9, McDonald Road to Pioneer Avenue, through DL 19, GP 1 and Sec. 19, Tp. 3, R. 28, W6M, 1.1 km		6,619.33	
Keith-Wilson Road widenings in Lot 2 of Parcel "A" of the SW. ¼ of Sec. 12, Tp. 23, Plan 18049, NWD		1,128.90	
Lougheed Highway widenings in part of SE. ¼, Sec. 25, Tp. 4, R. 28 and Sec. 30, Tp. 4, R. 27, W6M, NWD		840.03	
Slesse Road through part of SE. ¼, Sec. 33, Tp. 1, R. 29, W6M, NWD, 0.2 km, District Plan 33.39		1,588.63	
Trans-Canada Highway, Jones Creek-Hunter Creek (LTO Plan 47424) through Bk. A (Ref. Plan B527K) in part NE. ¼, Sec. 19, Tp. 4, R. 26, W6M		623.48	11,000.37

CHILLIWACK DISTRICT—*Continued*

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Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Agassiz curb and gutter, Evergreen Drive and Cheam Avenue		13,903.00	
Agassiz-Ruby Creek, Agassiz to Maria Slough		14,993.75	
Auchenway Road		15,873.00	
Edwards Road 52		14,100.00	58,869.75
Total, Chilliwack District			2,627,316.32

COLUMBIA RIVER DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,737,564.62
Snow removal			1,361,254.08
Maintenance of bridges			167,856.93
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour—			
Project C-0135—Minor betterments, miscellaneous		96,052.16	
C-0137—Minor betterments, miscellaneous		227,150.00	
C-0512—Highway 93/95, shoulder widening, drainage		140,000.00	
C-0841—Cranbrook area roads, flushcoat (see also Kootenay)		130,000.01	
C-0842—Pighin Road, reconstruct		50,000.00	
C-0843—Mission-Wasa Low Road 16, reconstruct		35,000.00	
C-0844—Trans-Canada Highway 1, West, major shoulder repairs		50,000.00	
C-0845—Windermere area roads, pave		149,833.00	
C-0846—Golden-Donald Bench Road, reconstruct and gravel		50,113.00	
C-0847—Miscellaneous engineering survey, Golden		25,054.00	
C-0848—Highway 93/95, Kootenay-Columbia Highway, replace asphalt guardrail at viewpoint		7,850.00	
C-2762—St. Mary's Lake Road 18, reconstruct and pave		100,000.00	
N-0387—Guardrail installation		63,590.00	
W-0355—Fencing Schedule 2 Highways		25,000.00	1,149,642.17
Highway Safety Branch			
Project C-0205—General Safety Works, wheelchair drop curbs, Cranbrook and Kimberley (see also Kootenay)			1,937.00
Traffic Branch			
Project E-0621—Invermere Arterial at Toby Creek Road Connector, Invermere, lighting installation			7,872.14
Bridges and Ferry Landings			
Day Labour			
Project B-0998—Lewis Creek and Curson Bridges (see also Kootenay)			25,000.01
Paving Branch			
Project S-0084—Miscellaneous surface seal, Highway 95, Kimberley-Cranbrook	80,253.05		
Road graded seal, Windermere to Dutch Creek, Athalmer-Wilmer	110.90		
Shoulder graded seal, Highway 95A, Wasa Junction to Kimberley	758.16		
Shoulder seal Golden: Golden-McMurdo	121.99		
Shoulder seal Windermere-Radium Golf Course	160.81	81,404.91	
S-0085—Miscellaneous drum mix, Toby Creek Road and Toby Bench, (Golden)		155.32	81,560.23
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Athalmer, Highway 93/95		557.00	
Highway 95A, extensions in Kimberley		25,687.85	
Lower Toby Creek Road		28,456.13	
Minor road surveys		27,384.99	
Radium Hot Springs		42,886.98	
Trans-Canada Highway Golden-Yoho Bridge		44,145.83	
Village of Invermere 6th Street Connection		58.76	169,177.54
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Houlgrave Road 55 and Neave Road 160 through DL's 376, 7881 and SL 82 of DL 4596 KM, Plan 1232			9,490.25

COLUMBIA RIVER DISTRICT—*Continued*

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Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Beard's Creek Road 17 and Spence Road 66		10,710.00	
Blaeberry School Road 37		1,545.60	
Campbell Road 7		26,789.13	
Dorney Road 85		31.50	
Findlay Creek Road		7,144.50	
Golden Donald Upper Road 42		20,695.06	
Hartley Road 39		2,602.00	
Highway 95A, Kimberley		8,200.00	
Holmes-Deakin Road 36		515.00	
Mayook Settlement Road 52		812.62	
Moberly School Road 56		740.00	
Sanborn Road 58		565.82	
Thomas Road 309		14,127.50	
Toby Creek Road 4		2,000.00	
Upper Levels Road 7		1.00	96,479.73
Total, Columbia River District			5,807,834.70

COMOX DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,188,392.91
Snow removal			766,190.73
Maintenance of bridges			152,120.70
Maintenance and operation of ferries—			
Comox–Powell River Ferry (see also MacKenzie)		1,979,202.61	
Denman Island Ferry		1,202,196.79	
Hornby Island Ferry		911,980.76	
Lasqueti Island Ferry		183,000.00	4,276,380.16
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		3,103.10	
C-0154—Minor betterments, miscellaneous		143,049.23	
C-0155—Minor betterments, Courtenay	250,002.76		
Swan Road, paving and Denman Hill improvements	60,567.35		
Miscellaneous	21,484.19	332,054.30	
C-0545—Condensory Road, construct extension		141,997.03	
C-0899—Drew Road (French Creek), minor construction and pave		31,856.23	
C-0917—Island Highway 19, Dundas Road to Black Creek Bridge, widen and realign		166,996.41	
C-0920—Hornby Island miscellaneous roads, seal coat		38,969.98	
C-0921—Courtenay area miscellaneous roads, seal coat		26,522.69	
C-1021—Lee Road at Island Highway 19, construct left turn slots		72,679.12	957,228.09
Construction Branch			
Project C-3989—Forest Road, Port Alberni to Cumberland Road (see also Alberni)		2,537.56	
C-4527—17th Street Crossing, Courtenay, Cliffe Avenue to Dingwall Road		1,648,151.83	1,650,689.39
Highway Safety Branch			
Project C-0204—School route improvements—			
Footpath, Lake Trail Road		8,999.00	
Footpath, Little River Road from Knight Road to Airbase		13,503.00	22,502.00
Traffic Branch			
Project E-0715—Route 19, Lantzville to Craig's Crossing, signal and lighting installations (see also Nanaimo)		101,508.10	
E-0726—Courtenay bypass, signal and lighting installation from Route 19 at 17th Street to Route 19 at Headquarters Road		121,107.31	222,615.41
Bridges and Ferry Landings			
Day Labour			
Project B-1298—Denman Island east ferry terminal, electrical alterations			42,242.00
Bridge Branch			
Project B-0656—Island Highway 19, Nanoose Overhead duplicate and Nanoose Overhead modifications		817,351.36	
B-1285—Courtenay River Crossing, 2701—17th Street, Courtenay, Island Highway		887,280.35	
B-1373—Bonell Creek Bridge duplicate and Nanoose Creek bridge duplicate, Island Highway		562,195.71	2,266,827.42
Ferries			
Project H-1045—*Princess of Vancouver*, purchase from Canadian Pacific Limited and modifications to the vessel (see also MacKenzie)		1,756,039.06	
H-1125—*Princess of Vancouver*, conversion to roll-on, roll-off vehicle ferry (see also Mackenzie)		1,811,740.27	3,567,779.33

COMOX DISTRICT—*Continued*

	$	$	$
Paving Branch			
Project S-0639—Highway 19, Black Creek University of British Columbia Farms to Ocean Grove			2,231,949.26
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0617—243B, Comox Avenue and Anderton Road, Town of Comox		6,147.00	
V-0618—257B, Comox Avenue, Stewart Street, Balmoral Avenue and Port Augusta Street, Town of Comox		10,698.00	
V-1116—222B, 8th Street Fitzgerald Avenue and 5th Street, City of Courtenay		23,283.75	
V-1135—274B, Royston Road Dunsmuir Avenue and Suttons Road, Village of Cumberland		9,392.21	49,520.96
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Canadian Highway 4, west boundary Lot 9 to Alberni Junction (see also Alberni)		7,060.50	
Coleman Road–Lazo Road		18,022.29	
Island Highway from Courtenay, curb and gutter to Courtenay River Bridge to H.Q. Road		5,402.19	
Island Highway from Parksville, curb and gutter		58,753.42	
Minor road surveys		44,819.97	
Vancouver Island Highway—Parksville bypass		25,117.24	159,175.61
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Island Highway through Part of DL's 81 and 89, Newcastle District (near Dashwood) 1.4 km		8,590.35	
Little River Road right of way through remainder of DL 103, Comox District		500.00	
Rogers Road through Lot C, DL 73, Plan 2965 and Lot 9, DL 80, Plan 1969, Newcastle District		4,158.31	13,248.66
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113			
17th Street Crossing, Cliffe Avenue to Dingwall Road		303,505.78	
Brewster Lake Road and Willow Street		72,500.00	
Condensory Road Extension		10,674.87	
Denman Road 54		843.91	
Gravel pits		300,475.00	
Hobbs Road		4,972.50	
Island Highway, Lantzville to Craig's Crossing		18,950.00	
Menzies Road 523		4,758.00	
Parksville, curb and gutter, Martindale Road to Dogwood Street		23,274.35	
Swan Road		5,456.00	745,410.41
Total, Comox District			19,312,273.04

COQUITLAM-MOODY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			304,122.28
Snow removal			38,821.37
Maintenance of bridges			12,797.22
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		54,257.52	
N-0370—Guardrail installation		12,794.00	67,051.52
Construction Branch			
Project C-1148—Colony Farm Overhead roadworks		58,907.08	
C-3402—Lougheed Highway North Road to Cape Horn, reconstruction		58,576.19	
C-4092—Cape Horn-Pitt River Highway, Mary Hill by-pass		268,796.77	386,280.04
Traffic Branch			
Project E-0809—Route 7A at Moray Street, Port Moody, signal and lighting installation		20,395.82	
E-7807—Route 7, North Road, to Brunette Street, Coquitlam, signal and lighting installation		6,572.80	26,968.62
Roadside Development and Landscape Branch			
Project D-1038—Port Mann Bridge, Hydro-seeding work			3,105.84
Bridges and Ferry Landings			
Bridge Branch			
Project B-0870—Pitt River Bridge, upstream structure, Lougheed Highway (see also Dewdney)		1,595.84	
B-1374—Colony Farm Overhead, Cape Horn to Pitt River Highway		4,375,819.15	4,377,414.99
Paving Branch			
Project S-1058—Port Mann Bridge deck, asphalt re-cap (see also Surrey)			12,021.05
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-1294—288B, Pitt River, McLean and Kingsway Avenue, City of Port Coquitlam		207,188.43	
V-1302—265B, Knowle Drive, City of Port Moody		96,230.00	303,418.43
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Barnet Highway from Sperling Avenue to Clarke Road (see also Burnaby North)		8,266.99	
Highway 7, Highway 7A to Dewdney Trunk Road		165.00	
Ioco Overhead to Sharpe Road		2,355.00	
Minor road survey		1,305.00	
Port Moody Arterial		1,766.12	13,858.11
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Lougheed Highway, Colony Farm interchange		6,129.07	
Mary Hill by-pass		689,383.14	695,512.21
Total, Coquitlam-Moody District			6,241,371.68

COWICHAN-MALAHAT DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,682,430.56
Snow removal			358,522.40
Maintenance of bridges			151,317.53
Maintenance and operation of ferries—Thetis Island Ferry			1,058,709.77
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour—			
Project C-0152—Minor betterments, miscellaneous		190,691.97	
C-0902—Riverbottom Road, reconstruct		17,068.00	
C-0903—Chapman Road, reconstruct		26,289.08	
C-0906—Mountain Road, reconstruct and pave		33,687.00	
C-0907—Old Cowichan Lake Road, reconstruct access to Cowichan Lake Road		183,344.22	
C-0908—Route 1, Coronation to York Road, recap		10,535.00	
C-0909—Crofton Road, recap pavement		51,167.57	
N-0395—Guardrail installation		35,526.55	548,309.39
Construction Branch			
Project C-3711—Trans-Canada Highway 1, Bench Road to Duncan, grading			813,867.30
Highway Safety Branch			
Project C-0204—School Route improvements—			
Construct walkway bridge, Wilkinson Road, Shawnigan		9,458.00	
Shoulder treatment, North Shore Road, (Lake Cowichan)		7,987.00	
Shoulder treatment, Cobble Hill Road		7,862.00	25,307.00
Traffic Branch			
Project E-0343—Route 1 at Allenby Road, Duncan, lighting and signal installation		65,503.93	
E-0669—Route 1 at James York Road, Duncan, signal and lighting revision		9,818.00	75,321.93
Bridges and Ferry Landings			
Day Labour			
Project B-1017—Burnt Bridge			43,025.99
Bridge Branch			
Project B-0663—Cowichan River Bridge, modifications		28,136.00	
B-0751—Meade Creek Bridge, reconstruction		186,791.97	
B-0976—Cowichan River Bridge, Chemainus River Bridge, Trans-Canada Highway 1		90,369.53	305,297.50
Paving Branch			
Project S-0084—Miscellaneous surface seal, road surface chip seal, Highway 1 junction to Meade Creek Bridge (31 km)		21,055.00	
S-0744—Highway 18, junction Trans-Canada Highway to Meade Creek Bridge		1,054,809.22	
S-6201—Trans-Canada Highway 1, Mill Bay to Duncan and miscellaneous roads		4,930.61	1,080,794.83
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0693—269B, Oak Street, District of North Cowichan		10,450.00	
V-0694—36B, Maple Bay Road, District of North Cowichan		67,991.16	
V-0695—169B, Chemainus Road, District of North Cowichan		74,024.93	152,466.09

COWICHAN-MALAHAT DISTRICT—*Continued*

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Design and Survey Branch			
Surveys Generally—Project L-0101—			
Crofton access Trans-Canada Highway at Mt. Sicker		12,560.00	
Island Highway from Chemainus to Ladysmith		66,679.12	
Minor road surveys		66,519.07	
Southshore Road (Lake Cowichan) from Lakeview Avenue to E and N Railway		9.75	
Trans-Canada Highway 1, Malahat		43,464.45	
Trans-Canada Highway south of Duncan		15,721.32	204,953.71
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Reposting of unregistered plan of right of way through Oyster Bay Indian Reserve 12, File LS01-1-72			282.30
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Parker Road		5.00	
Trans-Canada Highway, Bench Road, Duncan		141,990.00	141,995.00
Total, Cowichan-Malahat District			6,642,601.30

DELTA DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			792,551.48
Snow removal			58,179.73
Maintenance of bridges			119,895.98
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		41,765.93	
C-0802—Scott Road at 70th Avenue, culvert replacement (see also Surrey)		6,633.63	
C-1064—Tsawwassen Indian Reserve, Route 17, fencing of right of way		35,000.00	
W-0793—Fencing Schedule 2 Highways		15,399.41	98,798.97
Construction Branch			
Project C-0672—Fraser River Crossing (Annacis Island), relocation of B.C.H.P.A. gas line, south side, Highway 99–Queensborough Bridge		1,119,615.00	
C-3325—George Massey Tunnel, Highway 99, installation of sprinkler system (see also Richmond)		10,694.94	1,130,309.94
Bill 7			
Project C-0598—Fraser River Crossing (Annacis Island), supply and stockpile of dredged material from the Fraser River (see also New Westminster)		1,508,185.29	
C-0672—Fraser River Crossing (Annacis Island), relocation of B.C.H.P.A. gas line, south side Highway 99, Queensborough Bridge		379,801.20	
C-1095—Fraser River Crossing (Annacis Island), construction of test fill		208,534.81	
C-1122—Fraser River Crossing (Annacis Island) approaches, construct engineering access road		256,848.27	2,353,369.57
Traffic Branch			
Project E-0280—Route 99, Massey Tunnel, reversible lane electrical and signing (see also Richmond)			2,667.49
Bridges and Ferry Landings			
Bridge Branch			
Project B-0895—Fraser River Crossing (Annacis Island), main span (see also New Westminster)			11,859.28
Bill 7			
Project B-0895—Fraser River Crossing (Annacis Island), main span (see also New Westminster)			1,469,689.18
Paving Branch			
Project S-0035—Highway 99 and Sea Island Highway Oak Street to George Massey Tunnel (see also Richmond)		146,894.97	
S-1448—Highway 10, Delta, Ladner Trunk Road from Chillukthan Slough to Highway 17, storm drainage paving, curb and gutter and lighting		2,950.37	149,845.34
Planning Branch			
Bill 7			
Project O-1188—Fraser River Crossing (Annacis Island) Project Study, preliminary design planning (see also New Westminster)			139,645.49cr

DELTA DISTRICT—*Continued*

	$	$	$
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Scott Road from Highway 1 to Highway 10 (see also Surrey)		1,095.46	
Scott Road, Old Yale Road to 96th Avenue (see also Surrey)		810.94	1,906.40
Bill 7			
Project L-0558—Fraser River crossing (Annacis Island), south side of Fraser River to Highway 9			266,622.53
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Highway 17, widening through Lots 11, 12 and 13, Blk. H, DL 139, Gp. 2, NWD, Plan 19544, LS 17-2, SL			520.42
Geotechnical and Materials Branch			
Bill 7			
Project G-0038—Fraser River Crossing (Annacis Island), geotechnical investigations (see also Richmond and New Westminster)			299,630.66
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Fraser River Crossing (Annacis Island) project	4,142.40		
Chilliukthan Slough to Highway 17	93,240.00	97,382.40	
P-0599—Fraser River Crossing (Annacis Island) project		2,009,512.78	2,106,895.18
Bill 7			
Project P-0599—Fraser River Crossing (Annacis Island) project			13,655,195.75
Total, Delta District			22,378,292.41

DEWDNEY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,324,266.67
Snow removal			417,086.52
Maintenance of bridges			97,384.20
Maintenance and operation of ferries—Albion-Fort Langley Ferry			940,954.84
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		36,471.67	
C-0120—Minor betterments, miscellaneous		83,023.00	
C-0806—Miscellaneous patching, Chilliwack (see also Chilliwack and Yale-Lillooet)		26,720.01	
N-0370—Guardrail installation		12,794.00	159,008.68
Construction Branch			
Project C-4093—Haney business bypass, Maple Ridge, construction		721,749.56	
C-4291—Abbotsford-Mission Highway 11, Mission roadworks, northwest approach		371,966.07	1,093,715.63
Traffic Branch			
Project E-0594—Route 7, Haney business bypass, Maple Ridge signal and lighting installations		53,313.08	
E-0620—Route 11, Mission, new north approach Mission Bridge, lighting installation		60,725.38	
E-1141—Route 11 at Clayburn, Matsqui, Route 7 at Hawkins Pickle Road, Dewdney flashing beacon and lighting installation (see also Central Fraser Valley)		1,279.28	115,317.74
Bridges and Ferry Landings			
Bridge Branch			
Project B-0870—Pitt River Bridge up-stream structure, Lougheed Highway (see also Coquitlam-Moody)		1,595.84	
B-1375—Pitt River Bridge 58 rehabilitation of superstructure, Lougheed Highway		20,769.14	22,364.98
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0717—74B, Harris Road, District of Pitt Meadows		10,390.43	
V-0718—75B, Hammond Road, District of Pitt Meadows		14,446.72	
V-0719—79B, McNeil Road, District of Pitt Meadows		21,954.58	
V-0731—253B, Dewdney Trunk Road and 224th Street, District of Maple Ridge		28,450.00	
V-0737—283B, Grand Street, District of Mission, Seventh Avenue and Cedar Valley Street		90,005.20	165,246.93
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Highway 11, Abbotsford-Mission mapping (see also Central Fraser Valley)		351.93	
Layout of first curve—north approach to Mission Bridge		49,687.84	
Lougheed Highway from Haney to Silver Creek		60,928.30	
Lougheed Highway (existing) from Pitt River to Haney		52,240.11	
Silverdale Creek-Hurd Road, 6.0 km		13,595.43	176,803.61
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Lougheed Highway through Langley Indian Reserve 5		5,688.22	
Lougheed Highway through part of DL 48, Gp. 1, NWD at Sylvester Road		2,141.75	7,829.97

DEWDNEY DISTRICT—*Continued*

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Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Albion Ferry Landing approaches		143,769.00	
Brooks Road 27		4,530.83	
Gravel pits		90.00	
Haney–Silverdale		4,609,403.69	
Haney business bypass		8,988.63	
Johnson Slough onto Island North rest area		1.00	
Lougheed Highway and Hargh Street		1.00	
Lougheed Highway at Dewdney Trunk Road		800.00	
Mission Bridge approaches		21.00	
Mission roadworks		478,542.23	
North Nicomen Road		9,223.51	5,255,370.89
Total, Dewdney District			9,775,350.66

ESQUIMALT-PORT RENFREW DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,631,000.54
Snow removal			178,790.66
Maintenance of bridges			172,502.82
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		4,136.25	
C-0153—Minor betterments,			
Langford area	86,450.38		
Miscellaneous	76,562.75	163,013.13	
C-0192—Helmcken Road, reconstruct and pave		134,613.98	
C-0547—View Royal area, miscellaneous roads, paving		121,683.20	
C-0912—Route 1, Spencer Road intersection, extend left turn		27.00cr	
C-0913—Route 1, Millstream intersection, extend left turn slot and relocate signals and lamps		11,428.96	
C-0914—Sooke Road at Glen Lake intersection, widen and realign for traffic channelization		75,854.30	510,702.82
Highway Safety Branch			
Project C-0204—School Route improvements—			
Shoulder treatment, Metchosin Road		5,513.00	
Shoulder treatment, Station Road		4,531.00	
Shoulder treatment, Wishart Road		5,054.00	15,098.00
Traffic Branch			
Project E-0893—Route 1A at Jacklin Road, Langford, signal and lighting installation		28,949.66	
E-0974—Route 1A at Stormont Road, View Royal, pedestrian signal installation		9,981.63	38,931.29
Bridges and Ferry Landings			
Day Labour			
Project B-1018—Phillip, Edwards, Rosemond and Clinch Bridges			159,500.65
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Humpback Road—Highway 1 to Highway 14		129.00	
Meaford-Latoria, Kelley Connex		61,811.34	
Minor road surveys		6,201.33	
Sooke Road (4 lane passing)		16,015.88	
Trans-Canada Highway and Millstream		8,413.00	
West Coast Highway 13		75,539.31	168,109.86
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Millstream Extension—Highway 1 to Latoria Road through Lot 1, Plan 33933 and part of Sec. 62, Esquimalt District		4,811.45	
Sooke Road in part of Lot 1, Blk. 17, Plan 2437, Sec. 65, Sooke District, Drawing 19-94, File LS 14		2,403.15	7,214.60
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Meaford Road-Latoria Road, Kelley Crossroad		1.00	
Millstream Road extension, Sooke Road and Allandale Road		707.64	
Trans-Canada Highway at Millstream Road		325,000.00	325,708.64
Total, Esquimalt-Port Renfrew			3,207,559.88

KAMLOOPS DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			5,767,096.67
Snow removal			2,175,241.76
Maintenance of bridges			618,858.43
Maintenance and operation of ferries			
McLure Ferry		59,188.76	
Little Fort Ferry		72,481.51	131,670.27
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0123—Minor betterments,			
Barriere area, various roads, widening, rock blasting, minor fence repair, miscellaneous projects	91,915.03		
Birch Island area, various roads, gravelling, bridge approach surveying, miscellaneous road construction, rock blasting, regravel shoulders	85,084.75		
Kamloops area north, various roads, machine paving and patching, road bed construction, install cattleguards, clear slide	61,286.02		
Miscellaneous	70,891.73	309,177.53	
C-0145—Minor betterments, miscellaneous		107,745.36	
C-0526—Section 6 roads, McBride, survey and draw plans (see also Prince George South)		4,943.51	
C-0564—Highway 5, Merritt-Kamloops, Aberdeen Shopping Mall extension		251,553.20	
C-0814—Agate Bay Road (Skwaan Bay), reconstruction and paving		195,067.80	
C-0815—Various roads, Kamloops, reconstruction and pave		166,853.37	
C-0880—Miscellaneous School Bus routes, McBride, gravel (see also Prince George South)		44,626.13	
C-2514—Clearwater Valley Road, reconstruction		69,345.32	
D-0251—Manufacture and supply, roadside tables and toilet buildings		8,621.63	
D-0947—Steigs Hill, gravel pit reclamation		353.68	
D-0948—Hundsheds, gravel pit reclamation		4,224.81	
D-4270—Trans-Canada Highway 1, Valleyview to Campbell Creek, Kamloops, highway beautification		61,941.83	
N-0373—Guardrail installation		43,916.25	
W-0344—Fencing Schedule 2 Highways		43,489.30	1,311,859.72
Construction Branch			
Project C-0790—Summit Drive Extension, Kamloops		2,588,426.79	
C-2845—Halston Overhead at Kamloops and Overlanders Bridge, north approach		7,486.50	
C-3948—Westsyde Road from Westmount to Franklin Road, City of Kamloops		23,190.16	
C-4102—Highway 24, 93 Mile-Little Fort, Little Fort-Phinetta Lake		786,652.75	3,405,756.20
Traffic Branch			
Project E-0702—(1) Signal and lighting installation Route 1 at Route 5, Kamloops, (2) Lighting installation Route 1 at Pacific Way, Kamloops, (3) Lighting installation Route 1 at Copperhead Drive		99,055.78	
E-1112—Route 5 at Summit Drive, Kamloops and Route 1 at Gleneden Road First Avenue, SW, Salmon Arm, lighting installation (see also Shuswap-Revelstoke)		3,428.00	102,483.78
Roadside Development and Landscape Branch			
Project D-0097—Halston Overpass, Eighth Street, Kamloops, landscape development			43,903.08

KAMLOOPS DISTRICT—*Continued*

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Bridges and Ferry Landings			
Day Labour			
Project B-1026—Fight 1 and 2 bridges			75,406.50
Bridge Branch			
Project B-0734—Clearwater Town Bridge, Old North Thompson Highway			2,100,993.56
Paving Branch			
Project S-4085—Miscellaneous Drum Mix paving, Clearwater Valley Road			556,652.41
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Kamloops access from Springhill Drive to Mission Flats		61,091.27	
Little Fort-Lac Des Roches (see also Cariboo)		47,680.02	
Minor road surveys		106.00	
North Thompson Crossing, Kamloops, photo and mapping leading to location survey		125,702.76	
North Thompson Highway, Clearwater River Bridge crossing		2,743.00	
Trans-Canada Highway 1 Cherry Creek to Cornwall Lodge		50,543.23	
Trans-Canada Highway from Valleyview to Campbell Creek		711.00	
Trans-Canada Highway, truck lanes in the Savona area		353.00	288,930.28
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Clearwater Valley Road (1) S. bdy. L. 2177 to N. bdy. L. 3048, KDYD, (2) through L. 3044, KDYD, 4.4 km, Dist. Draw. 21-1214-06		12,440.85	
Clearwater Valley Road, S. bdy. L. 4091 to N. bdy. L. 4100, KDYD 0.9 km		4,283.00	
Monte Lake Road 293 through north half and south half of DL 475, KDYD		2,026.00	
Reference plan to consolidate closed road Lots A and B, Plan 19190, File LSR 2-21		526.40	
Summit Drive extension Kamloops, Columbia Street to S. bdy. Drawing R2-47-05, 0.5 km		2,485.75	
Victoria Street Connector—Summit Drive extension through parts of DL 'F', Group 2, KDYD		4,500.00	
Victoria Street connector through Lot 2, DL 'F', Gp. 2, KDYD, Plan 4191		603.50	
Westsyde Road right of way through part CNR right of way, Plan B281—Halston Overhead DL 257, KDYD		1,406.00	28,271.50
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—			
Agate Bay Road		30.00	
Candle Creek Road		593.00	
Clearwater Crossing (Yellowhead South Highway 5)		28,435.00	
Clearwater Valley Road		4,801.31	
Dunn Lake Road		6,442.17	
Gravel Pits		461.94	
Halston Bridge approaches		1,100,000.00	
Halston Overhead		18,830.00	
Intersection of Highways 1 and 5 at Kamloops		4,561.88	
Lemieux Creek Road		2,200.00	
Summit Drive, Kamloops		1,067,772.91	
Sundry expenses		422.40	
Trans-Canada Highway 1		2.00	
Trans-Canada Highway—Valleyview Campbell Creek		262,272.50	
Westsyde Road, Westmount to Franklin		20,052.58	2,516,877.69
Total, Kamloops District			19,204,081.85

KOOTENAY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,084,384.81
Snow removal			1,045,138.92
Maintenance of bridges			154,431.14
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0027—Elk Valley Road 4, shoulder widening		140,000.00	
C-0135—Minor betterments, miscellaneous		89,197.84	
C-0136—Minor betterments, miscellaneous		170,600.00	
C-0511—Highway 3, Carbon Creek Bridge approaches, reconstruct and pave		90,000.00	
C-0841—Cranbrook area roads, flushcoat		129,999.99	
C-1061—Highway 3, Fernie, slide damage repairs		102,000.00	
C-1123—Elk Valley Road, Wilson Bridge approaches		8,675.00	
C-3069—Corbin Road, reconstruct, gravel and liquid calcium		230,000.00	
D-0953—Highway 3/95, Ryan rest area upgrading		26,500.00	
D-0954—Highway 3, Rampart rest area upgrading		5,000.00	
N-0385—Guardrail installation		5,300.00	
N-0386—Guardrail installation		63,590.00	
W-0353—Fencing Schedule 2 Highways		19,255.24	
W-0354—Fencing Schedule 2 Highways		25,000.00	1,105,118.07
Construction Branch			
Project C-3720—Highway 95A and Cranbrook Airport access road, construction			251,413.03
Highway Safety Branch			
Project C-0204—School route improvements, walkway under Elko Overhead Bridge		42,904.00	
C-0205—General safety works, wheelchair drop curbs, Cranbrook and Kimberley (see also Columbia River)		1,937.00	44,841.00
Traffic Branch			
Project E-0585—Route 95A, Wycliffe-Cranbrook section, lighting installation		4,072.71	
E-0757—Route 3 at Route 95 (Curzon Junction) Yahk, flashing beacon replacement and lighting installation		11,087.36	
E-1152—Sparwood-Elkford Road at Michel Prairie Bridge, Sparwood, signal and lighting installation		32,519.70	47,679.77
Bridges and Ferry Landings			
Day Labour			
Project B-0998—Lewis Creek and Curzon Bridges (see also Columbia River)		24,999.99	
B-0999—Carbon and Elk River Bridges		5,670.74	
B-1296—Michel Prairie Bridge, strengthen floor system		15,698.50	46,369.23
Bridge Branch			
Project B-1048—Wardner Bridge at Wardner		105,001.25	
B-1082—Wilson Bridge, Elk Valley Road		374,797.95	
B-1088—Highway 3, North Fernie Bridge, addition of a steel and timber sidewalk		82,138.84	
B-1169—Wasa Bridge, Highway 95		90.38	
B-1261—McPhee Bridge over St. Mary River, Highway 95A		756,446.04	
B-1345—Brewery Bridge, Cokato Road, Carbon Bridge, Southern Trans-Provincial Highway and Fording Drive Bridge, Fording Drive at Elkford		5,875.80	1,324,350.26
Paving Branch			
Project S-0084—Miscellaneous surface seals, Highway 63, Wardner-Fort Steel, 30.0 km			193,270.17

KOOTENAY DISTRICT—*Continued*

	$	$	$
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Cranbrook-Kimberley airport, north access		42.20	
Cranbrook North Interchange		11,341.40	
Elk Valley Highway from Elk River to Cummings Street		80,616.05	
Highway 3, Elko-Morrisey		15,421.05	
Minor road surveys		100,808.40	
Southern Trans-Provincial Highway 3, Upper Moyie Lake		29,403.59	
Wildlife reflector study (see also Nelson-Creston)		11,467.44	249,100.13
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Elk Valley Road 4, L 7782 to N. Bdy. L 7987, Kootenay District		4,857.30	
Kennedy Road 240 in DLs 11564, 11565, 11566 and 11567, Kootenay District, 0.5 km		1,236.75	
Mayook Settlement Road 52 through SL "A" of DL 4590, DL 677 and DL 6204, Kootenay District		1,313.80	
Southern Trans-Provincial Highway 3, Sparwood revision through Parcel "A" of Parcel 89, DL 4598, K.D., 1.7 km, File LS0 3-6-36		4,865.00	
St. Marys Lake Road 115, Highway 95A to Mathews Creek		8,826.21	21,099.06
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
13th Street 321		791.00	
Beaver Creek Road 629		1.00	
Butler Road 683		1.00	
Colvalli Road 21		1.00	
Elk Valley Arterial 489a		1,800.00	
Elk Valley Road (Sparwood to Elk River Crossing and Cummings Creek Bridge approaches)		112,972.58	
Savarie Subdivision		3,644.00	
Wycliffe Perry Creek Road 67		1.00	119,211.58
Total, Kootenay District			6,686,407.17

LANGLEY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			461,236.16
Snow removal			75,715.47
Maintenance of bridges			16,648.36
Maintenance and operation of ferries—Albion-Fort Langley Ferry			940,954.85
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		16,805.04	
C-1052—Declassification of Glover Road, City of Langley		20,000.00	
W-0793—Fencing Schedule 2 Highways		37,383.60	74,188.64
Construction Branch			
Project C-4406—Langley Bypass, construction from Highway 10 near Glover Road to Fraser Highway at 200th Street			32,246.22
Highway Safety Branch			
Project C-0204—School Route improvements, shoulder paving, Route 10 from Glover Road to Livingstone interchange			40,500.00
Traffic Branch			
Project E-0612—Route 1A at 232nd Street, Langley, signal and lighting installation			1,275.00
Paving Branch			
Project S-1458—Fraser Highway 1A and 200th Street, storm sewer, curb and gutter and paving			39,450.78
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Aldergrove-Bellingham		2,676.00	
Aldergrove 264th-270th		1,033.00	
Carvolth interchange (Highway 1 at 200th)		2,555.00	
Miscellaneous Langley from Fraser Highway at 208th Street to Glover Road		60.42	
Plan, profile and estimate for reconstruction of Glover Road between Spring Brook Road and 88th Avenue		1,019.00	7,343.42
Legal Surveys Office			
Legal Surveys—Project L-0899—			
Trans-Canada Highway widening in Lots J, K and L, Bk. F, Sec. 22, Bk. 5 North, Range 1 West, Plan 20722, NWD (158th and 157th Avenue)			754.21
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—Langley Bypass			45,507.24
Total, Langley District			1,735,820.35

MACKENZIE DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,574,236.40
Snow removal			295,828.50
Maintenance of bridges			133,051.14
Maintenance and operation of ferries—			
Comox-Powell River Ferry (see also Comox)		1,893,345.75	
Texada Island Ferry		2,114,480.73	4,007,826.48
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0118—Minor betterments, miscellaneous		122,600.00	
C-0146—Minor betterments, miscellaneous		13,395.78	
C-0800—Highway 101, Madeira Park intersection, reconstruction		189,814.29	
C-0883—Highway 20, miscellaneous gravelling (see also Cariboo)		16,141.39	
C-3632—Malaspina Road, reconstruct		78,100.00	
C-4244—Miscellaneous school bus and farm roads, Williams Lake, reconstruct and gravel (see also Cariboo)		90,647.58	
N-0369—Guardrail installation		59,829.95	570,528.99
Bridges and Ferry Landings			
Day Labour			
Project B-1013—Angus Bridge, replacement and approaches		109,000.00	
B-1046—Nygaard Bridge and Thorsen 1 Bridge, Highway 20, Bella Coola area, construction		45,732.45	154,732.45
Bridge Branch			
Project B-1139—Westview Ferry Terminal, emergency repairs to wingwall and dolphin		220,195.94	
B-1389—Blubber Bay Ferry Terminal, ramp replacement		273,689.88	493,885.82
Ferries			
Project H-1045—*Princess of Vancouver*, purchase from Canadian Pacific Limited and modifications to the vessel (see also Comox)		1,756,039.04	
H-1125—*Princess of Vancouver*, conversion to roll-on, roll-off vehicle ferry (see also Comox)		1,811,740.26	3,567,779.30
Paving Branch			
Project S-4701—Highway 20, Bella Coola Wharf to Saloompt Road section (km 0.0 to 20.9) 20.9 km, miscellaneous roads at Bella Coola, 2.6 km and Noosgulch Bridge to foot of hill section, (42.9) Total 66.4 km			1,783.79
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0831—227B, North Road, Village of Gibsons		30,000.00	
V-1174—143B, Duncan Street, District of Powell River		18,400.50	48,400.50
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Highway 101 from Langdale Ferry to Highway 101 at Park Road, Sechelt, bypass-airport to Trout Lake		186,829.52	
Highway 101 from Secret Cove to Madeira Park		64,291.72	
Minor road surveys		2,524.97	
West Sechelt, NW. Bay Road, Red Roofs Road		39.50	253,685.71

MACKENZIE DISTRICT—*Continued*

	$	$	$
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Highway 101 east boundary, DL 1506 to west boundary DC 1541, Gp. 1, NWD		2,724.42	
Sunshine Coast Highway 101 through Lots 85, D 40, 41 and 52, DL 1023, Gp. 1, NWD, 0.5 km, Dist. Draw. 12-37A		3,577.20	6,301.62
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Highway 101 at Madeira Park Road		174,901.68	
Lee Road		29,594.00	
Rights of Way requirements through DL 1331, Village of Sechelt		90,500.00	
Salloomt River Road 840		1,347.24	
Sunshine Coast Highway, Sechelt to Madeira Park		4,830.22	301,173.14
Total, Mackenzie District			11,409,213.84

MAILLARDVILLE-COQUITLAM DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			164,275.95
Snow removal			19,358.36
Maintenance of bridges			6,055.37
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous		10,964.15	
C-1173—Highway 1 near Brunette St., and 152nd St., excavate, regravel and repave failure areas (see also Surrey)		11,673.28	22,637.43
Bridges and Ferry Landings			
Day Labour			
Project B-1015—Port Mann Bridge, safety loaders, cages, railing (see also Surrey)			15,000.02
Design and Survey Branch			
Surveys Generally—Project L-0101—Mary Hill Bypass			160,030.45
Legal Surveys Office			
Legal Surveys—Project L-0099—Plan of statutory right of way, Brunette Street and Trans-Canada Highway in Lot 60 DL 1, Gp. 1, Dwg. 83-6			281.75
Property Services Branch			
Rights of way and Property Purchases—Project P-0113—Lougheed Highway, North Road to Cape Horne interchange			159,584.43
Total, Maillardville-Coquitlam District			547,223.76

NANAIMO DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,746,109.52
Snow removal			324,147.97
Maintenance of bridges			123,564.34
Maintenance and operation of ferries—			
Gabriola Island Ferry		1,942,026.81	
Newcastle Island Ferry subsidy		19,077.32	1,961,104.13
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		4,976.22	
C-0152—Minor betterments, miscellaneous		122,379.06	
C-0900—Akenhead Road, reconstruct and pave		47,528.17	
C-0901—Yellow Point Road, recap		24,695.50	
C-0904—South Road, reconstruct and pave		21,961.86	
C-0905—Jamieson Road, reconstruct and pave		30,032.05	
D-0012—Rest area upgrading generally		18,862.20	
D-0970—Trans-Canada Highway and Island Highway, highway beautification		17,664.00	
N-0395—Guardrail installation		10,493.00	298,592.06
Construction Branch			
Project C-2901—Highway 19, Lantzville to Craig's Crossing, reconstruction			5,986,716.80
Highway Safety Branch			
Project C-0202—Roadside hazard elimination			
Repair pavement drop-off, North Road, Gabriola Island	3,760.00		
Repair pavement drop-off, South Road, Gabriola Island	5,954.00	9,714.00	
C-0204—School route improvements			
Shoulder treatment, Hallberg Road, Cassidy	4,651.00		
Shoulder treatment, South Oyster Road, Cassidy	5,941.00	10,592.00	20,306.00
Traffic Branch			
Project E-0715—Route 19, Lantzville to Craig's Crossing, signal and lighting installations (see also Comox)		17,913.18	
E-1044—Route 19, Mary Ellen Drive to Hammond Bay Road, Nanaimo, signal and lighting installation		113,898.25	131,811.43
Ferries			
Project H-0678—Gabriola Island Ferry, new passenger and 70-automobile ferry			6,250,262.70
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Cypress Street to B.C. Ferry property		32,619.61	
Duke Point access road		3,548.36	
Highway 19, Bowen Road, Norwell and Rock City Road		54,673.10	
Highway 19, Nanaimo bypass		44,458.78	
Highway 19, Nanaimo, Hammond Bay Road–Superior Road		1,982.54	
Island Highway from Ladysmith to Carmichael Road		21,506.91	
Minor road surveys		13,294.92	
Terminal/Wallace Couplet, south end Nicol St. to George Pearson Bridge		51.30	172,135.52

NANAIMO DISTRICT—*Continued*

	$	$	$
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Kilpatrick Road through part of Parcel A (DD8657-N) of Lot 3, Bk. 2, Secs. 1, 11 and 12, R 4, Mountain District, Plan 3115		400.00	
Trans-Canada Highway through part DL 8, Oyster District (Ladysmith–Carmichael Road)		554.13	
Quesnel Road through part of DL 29, Oyster District and Sec. 1, R. 5, Cedar District		2,000.00	2,954.13
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Gabriola Island Ferry Terminal		38,320.00	
Island Highway, Norwell Drive to Hammond Bay		5,942.00	
Ladysmith—Carmichael		51,929.41	
Nanaimo Ferry Terminal		619,097.00	
Quesnel Road		1.00	
Trans-Canada Highway—Haslam Creek		1.00	
Trans-Canada Highway, Westdowne Road–Ladysmith		428,316.43	
Yellow Point Road		1.00	1,143,607.84
Total, Nanaimo District			19,161,312.44

NELSON-CRESTON DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			6,160,723.65
Snow removal			2,920,373.38
Maintenance of bridges			565,123.21
Maintenance and operation of ferries—			
Glade Ferry		163,189.17	
Harrop Ferry		209,941.58	
Balfour Dock	19,135.71		
Kootenay Bay Dock	16,904.65		
Kootenay Lake Ferry	1,561,900.43	1,597,940.79	
Sunshine Bay dry dock		7,831.49	1,978,903.03
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0131—Minor betterments, miscellaneous		227,200.00	
C-0134—Minor betterments, miscellaneous		158,209.41	
C-0139—Minor betterments, miscellaneous		155,417.95	
C-0502—Nelson area roads, widen and improve		110,039.26	
C-0503—Winlaw area roads, widen and improve		63,409.05	
C-0504—Salmo area roads, widen and improve		19,990.78	
C-0508—Nakusp area roads, upgrade and pave		50,000.00	
C-0517—Pilot Bay Road, upgrading		19,997.41	
C-0834—Highway 3A, Taghum Bridge–Sproule Creek intersection, repave and improve		19,915.31	
C-0835—Upper Passmore Road, extension construction		26,458.50	
C-0839—Argenta–Johnson's Landing, widen and upgrade		30,000.00	
C-0851—Highways 3, 3A, 2 and 21, shoulder reconstruction		30,214.92	
C-0852—Creston and Crawford Bay area roads, construction, gravelling		205,424.63	
C-0853—Creston–Erickson Road and Short Road, Shouldering, drainage		76,016.60	
C-0854—Cory Road, level and pave		9,139.40	
C-0855—Abbey Road, new construction		24,999.93	
C-0856—Snider Road, construction		15,000.00	
C-0857—Lakeview Road, clearing, grubbing and drainage		25,941.97	
C-0858—Creston Arterial, wheelchair curb drops		3,996.35	
C-0859—Parking Shed Road, reconstruction		29,995.14	
C-2559—Highway 3A, Nelson–Balfour, reconstruction		299,729.26	
D-0768—Coyes Hill and Summit Lake rest area, upgrading		42,500.00	
D-0769—Gravel Pit reclamation, Meadow Pit, Cunliffe Pit, Tie Lake Pit, Birchbank Pit, Sproule Pit, Hopmin Pit and Apex Pit		58,713.33	
N-0381—Guardrail installation		63,589.87	
N-0384—Guardrail installation		131,747.25	
N-0389—Guardrail installation		63,588.72	
W-0794—Fencing Schedule 2 Highways		5,000.00	1,966,235.04
Construction Branch			
Project C-2317—Southern Trans-Provincial Highway 3, South Fork–Salmo, reconstruction			123,871.76
Highway Safety Branch			
Project C-0204—School route improvements,			
Footpath on Duck Creek Road		13,501.52	
Footpath, Route 3A from Nelson to Mile Six on North Shore		9,000.00	
Footpath, Willow Point Duhamel Creek		17,780.31	40,281.83
Traffic Branch			
Project E-0727—Route 3A at Taghum Bridge, east intersection, Taghum, lighting installation		19,580.13	
E-1114—Route 3A at Vernon Street Ward Street, signal and lighting revision		16,377.69	35,957.82

NELSON-CRESTON DISTRICT—*Continued*

	$	$	$
Bridges and Ferry Landings			
Day Labour			
Project B-0995—Alry Creek and Silver King Bridges		38,000.00	
B-0997—Pre-emption, Rapid, Meadow Creek, Tenderfoot Creek Bridges		151,481.89	
B-1001—Boulden Creek, Meadow Creek, Crawford Creek and Bailey Bridges		149,988.09	
B-1070—Slocan River Bridges, materials, installation		165,000.00	504,469.98
Bridge Branch			
Project B-0939—Taghum Bridge, Southern Trans-Provincial Highway 3A, deck		500.00	
B-1200—Woodchuck Bridge and Erie Creek Bridge, Highway 6		8,012.00	
B-1390—Balfour Ferry Terminal, marine structure replacement		37,050.60	45,562.60
Ferries			
Project H-1134—Balfour Ferry, re-engining			51,632.77
Paving Branch			
Project S-0084—Miscellaneous surface seal, Creston area, miscellaneous roads, 35.0 km		272,825.72	
S-0085—Miscellaneous drum-mix paving 6			
Silverton to 12 Mile Creek, 19 km	835,510.26		
Creston area, miscellaneous, 24 km	973,631.33	1,809,141.59	
S-3101—Highway 3, Salmo to 8.05 km south, Burnt Flats to 13.5 km east and miscellaneous work on the Salmo–Creston Skyway and Highway 6, Burnt Flats to Nelway		10,811.17	
S-3901—Highway 3 and Highway 21, Creston to Blazed Creek and Creston to Porthill		9,316.58	
S-3918—Southern Trans-Provincial Highway 3, paving Sanca Creek to Creston section and intermittent recap of the Salmo to Creston section		5,813.93	2,107,908.99
Municipal Programs Branch			
Amalgamation Grants			
Project O-0925—Town of Creston, amalgamation grant			33,793.14
Secondary Highway Construction and Improvements			
Project V-0706—275B, Creston–Erickson Road, 16th and 17th Avenues, Town of Creston		1,200.00	
V-1293—163B, First Street, Wright Street and Victoria Road intersection, City of Revelstoke		52,243.56	53,443.56
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Avis Road, Nelson		144.00	
Creston bypass revisions		12,986.00	
Fauquier–Passmore via Octopus (see also Okanagan North)		189.04	
Highway 31, Gerrard to west side of Trout Lake (see also Shuswap–Revelstoke)		22,695.96	
Minor road surveys		42,814.36	
Nelson waterfront road from Vernon Street to Elwyn Street		7,608.17	
Nelson–Creston Highway from Nelson to Balfour		52,696.01	
Wildlife reflector study (see also Kootenay)		11,467.44	150,600.98
Legal Surveys Office			
Legal Surveys—Project L-0888—			
DL [illegible], KD, No. 18, Crescent Bay and No. 251, Bartly Roads		5,247.88	
[illegible] Road 156 and Lakeville Road 33, through parts of Sec. 6, DLs 251 and 812, KD		1,418.50	
Southern Trans-Provincial Highway 3A through part Bk. 1s, Plan 781, DL 302, AKD		1,100.00	
Vernon–Slocan Highway 6, R/W through DL 1474, KD		8,129.76	
Vernon–Slocan Highway 6 and proposed subdivision of part of Lot 6, Plan 725, DL [illegible], KD		2,000.00	17,896.14

NELSON-CRESTON DISTRICT—*Continued*

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Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Ainsworth Townsite		5,500.00	
Barbados Road 76		8,452.00	
Bonnington Road 32		500.00	
Cook Street bypass		11,775.20	
Creston bypass		310,605.66	
Crusher Road 78		1,574.30	
Fisherman's Pit Road		32,035.10	
Gilroy Road 118 and Highway 3A		37,400.00	
Gravel Pit Road 54		2,700.00	
Indian Point Road 489		9,986.75	
Kennedy Road 74		2,850.00	
Kickwillie Road 488		7,171.25	
Kuskanook Street 180		14,800.00	
Leadville Road 192		3,325.00	
Lewis Road 457		3,520.00	
Neale Lane 515		504.00	
Nelson Arterial Highway		30,000.00	
Nelson–Balfour Highway 3A		5,577.00	
Reclamation Road 276		6,200.65	
Riondel North Road 166		3,519.00	
Riondel Road 279		1,890.00	
Robson Road 287		737.00	
Sabrina Road 461		6,063.65	
Sesame Street 67		50.00	
Sproule Creek Road 320		6,000.00	
Stace Road 321		13,699.79	
Sundry expenses		22.08	
Upper Passmore Road 233		720.00	
Vernon-Slocan Highway 6		3,259.26	
View Road 98		1.00	
Wightwick Road 362		2,073.32	
Zak and Gensick Roads		7,635.14	540,147.15
Total, Nelson-Creston District			17,246,425.[illegible]

NEW WESTMINSTER DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			78,577.50
Snow removal			2,825.27
Maintenance of bridges			3,558.15
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Construction Branch			
Project C-1121—Marine Way, Byrne Road to north end of Queensborough Bridge, grade construction (see also Burnaby-Edmonds)			1,219.54
Bill 7			
Project C-0598—Fraser River Crossing, (Annacis Island), supply and stockpiling of dredged material from the Fraser River (see also Delta)			502,728.40
Traffic Branch			
Project E-0279—Route 1A/99A Pattullo Bridge, Lighting revision (see also Surrey)			7,341.53
Bridges and Ferry Landings			
Bridge Branch			
Project B-0894—Fraser River Crossing (Annacis Island), movable bridge		110,196.13	
B-0895—Fraser River Crossing (Annacis Island), main span (see also Delta)		11,859.28	122,055.41
Bill 7			
Project B-0894—Fraser River Crossing (Annacis Island), movable bridge		1,112,691.19	
B-0895—Fraser River Crossing (Annacis Island), main span (see also Delta)		1,469,689.18	2,582,380.37
Planning Branch			
Bill 7			
Project O-1188—Fraser River Crossing (Annacis Island), project study preliminary design Planning (see also Delta)			139,645.49 Cr.
Municipal Programs Branch			
Amalgamation Grants			
Project O-0994—Village of Belcarra, amalgamation grant			96,585.00
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Fraser River Crossing (Annacis Island)		6.02	
Marine Way-Boundary Road to Byrne		3,024.11	3,030.13
Bill 7			
Project L-0558—			
Fraser River Crossing (Annacis Island)		493,215.87	
Belgrave Way to Carter (Annacis Truck Route)		71,792.00	565,007.87
Geotechnical and Materials Branch			
Bill 7			
Project G-0038—Fraser River Crossing, (Annacis Island), geotechnical investigations (see also Delta and Richmond)			233,046.04
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Sundry expenses			416.95
Total, New Westminster District			4,059,126.67

NORTH ISLAND DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,231,632.72
Snow removal			787,729.34
Maintenance of bridges			218,373.82
Maintenance and operation of ferries—			
Alert Bay Ferry		1,698,349.07	
Cortes Island Ferry		1,221,367.07	
Quadra Island Ferry		1,959,680.93	4,879,397.07
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0155—Minor betterments, miscellaneous		75,000.14	
C-0918—Highways 19 and 28, Campbell River, intersection improvements		79,981.90	
C-0919—Quadra Island, miscellaneous roads, seal coat		41,013.42	
C-0923—Port McNeil, widening		66,935.84	
D-0971—Highway 28 between Gold River and Campbell River, new rest area		32,263.05	
D-4200—Highway 19, new rest area development		42,454.69	
N-0398—Guardrail installation		33,099.00	370,748.04
Construction Branch			
Project C-2583—Vancouver Island Highway 19, Eve River, construction summit to Eve River		7,481.23	
C-2584—Vancouver Island Highway 19, Eve River–Tsitika River, construction		69,506.81	
C-4550—Nimpkish–Zeballos–Fair Harbour–Gold River Road		116,941.41	
C-4551—Head Bay Forest Road, Gold River to Tahsis		562,434.19	756,363.64
Traffic Branch			
Project E-0812—Route 19 at Sayward Road, Sayward, lighting installation		6,298.00	
E-1119—Route 19 at Route 28 and Willow Street, Campbell River, signal and lighting revision		39,895.92	46,193.92
Bridges and Ferry Landings			
Day Labour			
Project B-1020—Cluxewe Bridge			199,448.81
Bridge Branch			
Project B-1057—Quathiaski Cove Ferry Terminal		307,025.12	
B-1325—South Maquinna Drive Bridge over Extravagant Creek, Village of Tahsis, replacement		50,865.93	
B-1391—Campbell River Ferry Terminal		2,575,771.96	2,933,663.01
Ferries			
Project H-0772—Tachek, new generator sets		70,984.82	
H-0773—Tenaka, new generator sets		70,344.82	
H-0776—Spare propeller unit		218,045.00	359,374.64
Paving Branch			
Project S-0641—Port Alice to junction of Island Highway 19			1,006,006.33
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-1319—240B, Airport Road, District of Port Hardy			665.00

NORTH ISLAND DISTRICT—*Continued*

	$	$	$
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Coal Harbour access, off Highway 19 near Port Hardy, Lamonte Bridge site plan		6,328.92	
Gold River–Tahsis, traverse existing road between Upana Summit and Thupana Creek		36,151.64	
Highway 19 (Port Hardy–Port McNeill), Cluxewe Bridge site plan		8,033.72	
Highway 19 (Port Hardy–Port McNeill), Keogh Bridge site plan		7,184.56	
Highway 28, Buttle Lake site plan at Buttle Narrows		9,178.69	
Island Highway, north of Campbell River		3,985.32	
Mill Bay–Cowichan Golf Course		75,576.12	
Minor road surveys		159,205.47	
Port Hardy, curb and gutter		346.46	
Sachts Bridge–Sayward, Courtenay		32,760.19	
Willow Point–Campbell River		651.45	339,402.54
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Island Highway in part DL 66, Sayward District, at Brewster Lake Road and Willow Avenue		2,858.00	
Island Highway, right of way widenings in parts of section re Tp. 1, Comox District		450.00	
Island Highway, widenings in parts of Bk. 29, Tp. 5, CD		9,361.26	
Plan of subdivision of part of Lot 440, part of NE. ¼, Sec. 32, Tp. 6, Rupert District, shown included in Plan 36672—Bear Cove Ferry Terminal, File LS 19-3A-5		2,459.49	
Reference plan for portion of closed road, (Plan 2513), R/W within DL 1416 and DL 1418		587.96	
Whaletown and Hunt Roads in E. ½ of SE. ¼, Sec. 34, Sayward District, Cortes Island		1,948.55	17,665.26
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Alert Bay Ferry Terminal		390.21	
Campbell River Ferry Terminal		250,001.00	
Iron River Road–York Road		86,000.00	
Island Highway 19		18,268.00	
Masters Road		50.00	
Red Granite Road 743		58,000.00	
Sutil Point Road 33		4,351.00	417,060.21
Total, North Island District			14,643,804.35

NORTH PEACE RIVER DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			3,152,026.19
Snow removal			1,930,253.00
Maintenance of bridges			235,852.00
Maintenance and operation of ferries— Fort Nelson Hover Ferry			298,967.69
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0143—Minor betterments, miscellaneous		304,523.38	
C-0168—Miscellaneous roads, Fort St. John, road stabilization		51,527.61	
C-0522—Miscellaneous roads, Fort St. John, rip-rap and erosion control		22,854.95	
C-0872—Route 29, Deepcreek realignment		150,953.46	
C-0873—Highway 97, prepare for paving intersection reconstruction and paving program		210,576.78	
C-0874—Miscellaneous roads, Fort St. John, reconstruction and gravel		1,353,410.91	
C-0875—Farm access and assistance		48,961.67	
C-1055—Miscellaneous roads, Fort St. John, prepare for paving		996,725.85	
C-1090—Rose Prairie-Montney, prepare for paving		1,683,149.04	
C-4191—Miscellaneous roads, Fort St. John area, gravelling		178,734.78	
N-0432—Guardrail installation		74,293.42	
W-0359—Fencing Schedule 2 Highways		10,748.50	5,086,460.35
Construction Branch			
Project C-4484—Liard Highway, construction north of Fort Nelson River			2,081,782.70
Highway Safety Branch			
Project C-0205—General Safety Works, delineation on Route 29			3,094.00
Bridges and Ferry Landings			
Day Labour			
Project B-1005—Fort Nelson River Bridge		85,212.89	
B-1056—Young Bridge at Rose Prairie, construction		140,533.92	225,746.81
Bridge Branch			
Project B-0286—Petitot River Bridge, Fort Nelson to Fort Simpson Highway			2,161,173.96
Ferries			
Project H-1100—Fort Nelson River Crossing, Hover Ferry			748,128.57
Paving Branch			
Project S-1049—Fort St. John, miscellaneous roads, paving		1,341,169.42	
S-1120—Crushed granular material in stockpile, Rose Prairie area		275,673.19	
S-4401—Miscellaneous roads, Fort St. John		48,621.64	1,665,464.25
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Buick Creek north Fort St. John		264.50	
Fort St. John, Alaska Highway, 88th Street to McKenzie Avenue		38,567.80	
Highway 29, Halfway River to Cache Creek		15,679.87	
Minor road surveys		31,972.22	
Site plan and approaches, Cypress Creek		528.93	86,953.32

NORTH PEACE RIVER DISTRICT—*Continued*

	$	$	$
Legal Surveys Office—			
Legal Surveys—Project L-0999—			
Alaska Highway, Big Beaver Creek to Parker Creek, 10.8 km		3,496.43	
Alaska Highway, Mile 83 to Mile 92 section		9,832.01	
Alaska Highway, Mile Post 274 to Big Beaver Creek, 20.7 km		5,998.90	19,327.34
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Fort St. John, curb and gutter		3.00	
Gravel Pits		133,064.00	
Johnson Road—232C		3,806.78	
Road 105		306.00	
Road 145		8,540.00	
Road 242		49,417.00	
Road 270		204.00	195,134.78
Total, North Peace River District			17,890,565.56

NORTH VANCOUVER-CAPILANO DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			197,942.52
Snow removal			75,185.14
Maintenance of bridges			315,292.48
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous			37,247.44
Bridges and Ferry Landings			
Day Labour			
Project B-1109—McKay Bridge, construct 4-lane bridge			68,521.91
Bridge Branch			
Project B-1172—Lion's Gate Bridge, major repairs to North Cable bent			7,884.64
Design and Survey Branch			
Surveys Generally—Project L-0101—Upper Levels control line			71,891.44
Total, North Vancouver-Capilano District			773,965.57

NORTH VANCOUVER-SEYMOUR DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			433,343.84
Snow removal			150,370.27
Maintenance of bridges			57,530.76
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0117—Minor betterments, miscellaneous			43,479.01
Paving Branch			
Project S-1118—Fern Street to Second Narrows, Trans-Canada Highway 1 and Main Street, Mountain Highway to Highway 1			5,793.85
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Mapping and design study, North Shore transportation study, Mountain Highway interchange and Keith Road to Mt. Seymour Connection		80,615.71	
Seymour River, North Vancouver		1,518.59	
Trans-Canada Highway, Second Narrows Bridge–Lynn Creek		2,205.00	84,339.30
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Fern Street–Mount Seymour Parkway		1,200,000.00	
Fern Street, Seymour River Project		1,695.00	1,201,695.00
Total, North Vancouver-Seymour District			1,976,552.03

OAK BAY-GORDON HEAD DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,730.00
HIGHWAY CONSTRUCTION—CAPITAL			
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-1295—162B, Cadboro Bay Road, District of Oak Bay			52,710.25
Total, Oak Bay-Gordon Head District			55,440.25

OKANAGAN NORTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,279,631.73
Snow removal			1,241,475.42
Maintenance of bridges			115,711.42
Maintenance and operation of ferries—			
Needles-Fauquier Ferry		910,908.97	
Arrow Park Ferry		91,048.61	1,001,957.58
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0020—Highway 6, Monashee, reconstruct		228,456.97	
C-0125—Minor betterments, miscellaneous	142,755.00		
Vernon, improve area roads, gravel	58,296.98	201,051.98	
C-0130—Minor betterments, miscellaneous		43,051.03	
C-0134—Minor betterments, miscellaneous		65,596.00	
C-0267—Highway 6, Vernon-Slocan District boundary to bottom of Mine Hill, construction		49,938.65	
C-0466—Lumby-Mabel Lake Road, reconstruct and pave		299,588.94	
C-0829—Miscellaneous roads, Vernon, paving (see also Shuswap-Revelstoke)		99,993.28	
C-0830—Section 4 Roads, Vernon (see also Shuswap-Revelstoke)		39,829.01	
C-0840—Highway 6, Pre-emption Bridge, construct approaches		131,502.00	
C-1074—College access road, Vernon, gravelling		13,011.26	
C-2658—Westside Road, construction and pave		119,916.00	
D-0950—Kirshfelt, gravel pit reclamation		9,268.72	
N-0375—Guardrail installation		19,678.05	
N-0376—Guardrail installation		30,000.00	
N-0384—Guardrail installation		27,153.00	
W-0346—Fencing Schedule 2 Highways		33,440.06	1,411,474.95
Construction Branch			
Project C-3422—Okanagan Highway 97, Vernon to Swan Lake Junction, reconstruction			821,392.61
Highway Safety Branch			
Project C-0204—School route improvements—			
Paved footpath on Grant Road to O.K. Landing School, Vernon		4,392.00	
Paved footpath, Pottery Road, Vernon		8,675.00	
School bus turnarounds and stops, Cherryville		3,916.00	16,983.00
Traffic Branch			
Project E-1012—Route 97 at Reservoir Road, Vernon, lighting installation		16,393.30	
E-1129—Vernon, various intersections, operation red light		31,488.92	47,882.22
Bridges and Ferry Landings			
Day Labour			
Project B-1028—Genien Bridge			74,713.99
Bridge Branch			
Project B-0039—Monashee Highway 6, Kettle River Bridge			160,212.52
Ferries			
Project H-0771—Needles Ferry, spare propeller units		112,218.63	
H-0775—Arrow Park Ferry, hydraulic system and ramp		20,423.85	132,642.48

OKANAGAN NORTH DISTRICT—*Continued*

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Paving Branch			
Project S-0084—Miscellaneous surface seals, Vernon: road graded, seal Deep Creek Road, km 17.9 toward Duchett		33.71	
S-0637—Highway 6, Village of Lumby, Cattle Avenue to Shuswap Avenue, storm sewer, curb and gutter and paving		17,352.06	
S-2301—Monashee Highway 6, Inonoaklin Crossing to the base of Mine Hill		917,708.92	935,094.69
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0674—279B, Shuswap Avenue, Village of Lumby		9,500.00	
V-1151—251B, 27th Street, City of Vernon		6,750.00	16,250.00
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Fauquier–Passmore via Octopus (see also Nelson-Creston)		189.04	
Highway 6 in Vernon, 27th Street to 32nd Avenue		10,533.44	
Highway 6, Vernon–Slocan Highway		3,634.77	
Highway 97 to Crosier Road, Swan Lake Junction (see also Shuswap-Revelstoke)		9,873.84	
Intersection of 32nd and 48th at Vernon to Swan Lake		11,922.25	
Lumby, east boundary, Lot 2151 (region boundary)		8,482.15	
Minor road surveys		2,489.59	
Okanagan Highway 97 (Vaseaux Lake)		28,847.19	
Okanagan Highway from Oyama to Vernon		269,249.43	
Okanagan Highway from Vernon to Highway 97A Junction		213.00	
Okanagan Landing from East Side Road to Bench Road		4,233.08	
Survey from Highway 97 at Army Camp to Junction of 27th Street and Highway 6, 1.30 miles–2.1 km		1,982.08	
Vernon grid roads		545.00	
Vernon, west entrance to Lumby		1,146.00	
Westside Road from I.R. 10 to Ceasars Landing		136,452.82	489,793.68
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Highway 97A and Pleasant Valley Road through part of Sec. 24, Tp. 7 and Sec. 19, Tp. 4, ODYD		7,652.73	
Highway right of way through part of SE ¼, Sec. 34, Tp. 14, ODYD		1,386.93	
Oyama Road right of way through Plan M 8213, Frac. SE ¼, Sec. 11, Tp. 14, ODYD		550.00	
Reposting SW. corner of Lot 4, RP 28392 in N. ½ of Sec. 30, Tp. 57, ODYD, Richlands Road, Cherryville		355.24	
Reposting the remainder of Lot 22, Plan 1362, Sec. 24, Tp. 8, L and A gravel pit, File LSR 2-23		2,302.51	
Vernon–Slocan Highway 6, Petworth Road to Dure Meadow Road, 3.1 km		9,862.50	
Vernon–Slocan Highway 6, Ricardo Road to Murphy Road, 2.7 km, Dist. Dwgs. 175-1113		9,961.58	32,071.49

OKANAGAN NORTH DISTRICT—*Continued*

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Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Albers Road 2		30.00	
Baker-Hogg Road 142		7,747.50	
Beau Park Road		4.00	
Commonage Road 30		31,446.00	
Gravel pits		21,183.00	
Highway 6—Lumby, Vernon Street		18,960.86	
Highway 97, Bailey Road to Vernon		366,450.00	
Highway 97—Oyama		21,408.70	
Lodge Road		17,065.00	
MacDonald Road 120		6,000.00	
McCormack Road 186		18,620.00	
Okanagan Highway 97, Vernon-Swan Lake		1,450.00	
Okanagan Landing, Bench Road 96		5,535.00	
Oyama Road		20,000.00	
Pearson Road 306		503.00	
Pretty Road 26		1.00	
Rawlings Lake Road 107		25,430.00	
Shuswap River Drive 121		1.00	
Silver Queen Road 259		169.00	
Vernon-Slocan Highway 6		13,011.00	575,015.06
Total, Okanagan North District			9,352,302.84

OKANAGAN SOUTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,369,473.17
Snow removal			780,601.29
Maintenance of bridges			111,637.40
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0130—Minor betterments, miscellaneous		150,809.04	
C-2660—Westside Road (Kelowna), reconstruct		199,912.09	
C-3805—Miscellaneous roads, Kelowna City, reconstruct and paving		209,997.18	
C-4163—Kelowna and Winfield miscellaneous roads, gravelling and ditching		128,390.05	
C-4165—Highway 97, Westbank–Summerland, improvements		29,780.98	
N-0376—Guardrail installation		24,000.00	742,889.34
Construction Branch			
Project C-1066—Highway 97, Westbank to Kelowna, clearing and fencing, contract for the employment of Indians on Tsinstikeptum Reserve 10	42,155.21		
Grading	792,148.36		
Sec. 3, reconstruction	493,232.02	1,327,535.59	
C-4485—Highway 97, Westbank–Kelowna, Sec. 2, construction		488,871.24	1,816,406.83
Traffic Branch			
Project E-0104—Route 97 (Harvey Avenue), Glenmore St., Kelowna, signal and lighting replacement		37,537.49	
E-0993—Route 97 at Dilworth Drive Leckie Street, Kelowna, signal installation		41,503.53	
E-1036—Benvoulin Road at K.L.O Road, Kelowna, signal and lighting installation		23,320.12	
E-1051—Route 97 at McCurdy Road, Kelowna, signal installation and lighting revision		33,100.23	
E-1127—Route 97 at Cooper Road, Kelowna, signal revision		33,207.50	168,668.87
Bridges and Ferry Landings			
Day Labour			
Project B-1034—Mission Creek Bridge			2,394.63
Bridge Branch			
Project B-0688—Okanagan Lake Bridge, proposed 4 laning		176,622.22	
B-1054—Mission Creek Bridge, K.L.O Road, addition of sidewalk		60,837.26	237,459.48
Paving Branch			
Project S-2938—Glenmore Street upgrading, Kelowna			519,287.64
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Greater Kelowna road grid system		11,114.19	
Harvey Avenue, (Kelowna)		148,691.05	
Highway 33, Rutland, from Highway 97 to McKenzie Road		25,820.03	
Highway 97, Kelowna, Glenmore Street to Reid's Corner		1,880.51	
Kelowna Couplet		273.50	
Minor road surveys		5,421.91	
West Side–Nahun, new alignment, two lane		249.98	
Westbank–Kelowna impact study		17,339.00	210,790.17

OKANAGAN SOUTH DISTRICT—*Continued*

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Legal Surveys Office			
Legal Surveys—Project L-0099—			
Belgo Road through parts of Blks. 16 and 17 in NE ¼ Sec. 11, Tp. 26, ODYD		3,508.11	
Glenmore Street Extension, K.L.O. Road to N. bdy. DL 147, ODYD		5,458.98	
Glenmore Street Extension, S. bdy. NW ¼ Sec. 6, Tp. 26 to Casorso Road		93.90	
Glenmore Street Extension through Lot 1, Plan 14600, DL 135, ODYD (K.L.O. Road and Gordon Road)		741.75	
Glenmore Street widening, in Lot 1, Plan 14988, DL 137, ODYD		342.00	
Highway 97 and Sexsmith Road, widening in Lot A, Plan 6492, Lot A, Plan 4584 and in Lot A, Plan 2980		1,090.50	
Highway right of way through Duck Lake Indian Reserve 7, (Winfield, B.C.), LSR 2-29		2,741.92	
Lewis Road through Lot B, Plan 20352, Lot 2, Plan 1926, Lot 3, Plan 4283 in NW ¼ Sec. 13, Tp. 26, ODYD		900.35	
Okanagan Highway and Campbell Road through Tsinstikeptum Indian Reserve 10		21,451.89	
Okanagan Highway, Reid's Corner to Ellison Overhead section		6,178.20	
Plan of statutory right of way for drainage easement in Lots 32 and 33, Plan 17329, DL 581, ODYD		612.80	
Plan of statutory right of way for highway through Lots 18, 19 and 20, Plan 2536, DL 139, ODYD, File LS 97-2		1,084.61	
Westside Road right of way through Tsinstikeptum Indian Reserve 10		8,366.36	52,571.37
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Bartley Road 186		1.00	
Belgo Road		77,320.00	
Chase Road		2.00	
Glenmore Street extension		47,122.96	
Glenmore Street upgrading		2,712.76	
Glenrosa Road		80,000.00	
Gravel pits		800.00	
Harvey Avenue, widening		1,815,474.40	
Highway 97 at Westbank Couplet		4,065.00	
Highway 97, Rosedale Avenue, Summerland		92,513.69	
Highway 97—Winfield		127,514.74	
Kelowna–Westbank		3,335,595.59	
Okanagan Highway 97		1.00	
Reynold Road 439		2,500.00	
Sexsmith Road		1,126.00	
Swamp Road		17,000.00	
Tyndall Road 633		1,800.00	
Vernon–Aberdeen, Highway 6		1.00	
Westside Road		33,081.00	
Westside Road 138		1,500.00	
Woods Lake Bottom Road		263,691.60	5,903,822.74
Total, Okanagan South District			11,916,002.93

OMINECA DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			4,663,311.56
Snow removal			2,500,332.60
Maintenance of bridges			272,545.69
Maintenance and operation of ferries—Francois Lake Ferry			1,497,267.08
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0144—Minor betterments, miscellaneous		196,078.28	
C-0150—Minor betterments, miscellaneous		36,326.65	
C-0151—Minor betterments, miscellaneous		218,817.59	
C-0455—Miscellaneous farm roads, Vanderhoof, improve alignment, ditch and gravel		127,957.34	
C-0553—New Nechako Bridge at Vanderhoof, construct approaches		757,094.86	
C-0876—Lakeshore Drive, Fort St. James, paving		66,578.33	
C-0889—Highway 16, Nadina and Butler Avenues, Houston, construct turn slots		117,618.29	
C-0890—Highway 16, Topley Frontage Road, pave		59,566.31	
C-0891—Topley Landing Road (Granisle Highway), Fulton River Bridge, improve alignment of approaches		53,874.26	
C-0892—Walcott Extension Road, construction		99,988.57	
C-0893—Ootsa-Nadina (Brewer Creek) repair multiplate and complete approaches		99,729.40	
C-3039—Tachie Road, reconstruction		5,177.40	
C-3332—Stella Road (east end), reconstruction		51,370.71	
C-4496—Kenny Dam Road, improvements		150,852.35	
C-4497—Germansen Landing Road, gravelling		149,160.89	
D-0960—29 pits, gravel pit reclamation		17,643.79	
N-0393—Guardrail installation		14,964.43	
N-0433—Guardrail installation		11,772.00	
W-0360—Fencing Schedule 2 Highways		48,282.00	
W-0363—Fencing Schedule 2 Highways		7,040.46	
W-0364—Fencing Schedule 2 Highways		44,991.92	2,334,885.83
Highway Safety Branch			
Project C-0204—School route improvements—			
Pedestrian underpass, Route 16 at Chowsunket Street		11,988.00	
Shoulder widening, Route 16, west of Houston		41,681.00	53,669.00
Traffic Branch			
Project E-1077—1. Route 16 at West Fraser Sawmill Crossing, Fraser Lake, flashing beacon and lighting installation. 2. Route 16 at Fraser Avenue, Vanderhoof, lighting and signing installation. 3. Route 16 at Empire Street, Fort Fraser, flashing beacon and lighting installation			28,463.90
Bridges and Ferry Landings			
Day Labour			
Project B-1006—Greer Creek Bridge		129,852.00	
B-1025—Walcott and Burns Trestle		45,900.17	175,752.17
Bridge Branch			
Project B-0708—Vanderhoof West Bridge and Overhead		3,076,761.09	
B-1257—Endako Overhead and Endako River Bridge, Yellowhead Highway		39,697.16	3,116,458.25
Ferries			
Project H-1264—François Lake, refit trim dock facility and convert to a complete floating drydock			11,150.00

OMINECA DISTRICT—*Continued*

	$	$	$
Paving Branch			
Project S-0084—Miscellaneous surface seals, Highway 16, Burns Lake Airport (60.0 km), Houston Bridge (1.0 km), 59.0 km	22,384.58		
Southbank, miscellaneous roads	405,156.26		
Road graded seal, Endako "W" Boundary-Vanderhoof	157.69	427,698.53	
S-0414—Fraser Lake area, miscellaneous roads		240,508.45	
S-0763—Village of Vanderhoof Streets and miscellaneous roads		3,691,848.86	
S-5501—François Lake, miscellaneous roads		366,461.21	
S-5518—Village of Burns Lake, storm sewer, curb and gutter and paving		3,134.26	4,729,651.31
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Burns Lake Bypass, Yellowhead Highway 16		41,962.16	
Burns Lake, survey and design for connector route from Yellowhead Highway 16 to Highway 35 overpassing C.N.R. L5-35-402		35,559.89	
Houston—Highway 16		21,747.97	
Houston to Nadina River		216.96	
Vanderhoof Grid–Boundary Road extension, Victoria Street to 4th Street		44,946.96	
Vanderhoof-Stuart Lake (27), Nechako River Bridge approaches		535.00	144,968.94
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Drainage easement through Lot 1, Plan 4393 and Lot 2, Plans 3888 and 6740 all in Sec. 9, Tp. 11, R. 5, Coast District (Dwg. 45-A120-1)		1,090.10	
Kenny Dam Road in Secs. 4 and 23, Tp. 3, R. 4, C.D., 6.4 km		10,450.00	
Kispiox Valley Road 59 through Sik-a-dahk Indian Reserve 2		6,850.85	
Lakes District Road through Stoney Creek Indian Reserve 1, 4.3 km		6,000.00	
Stoney Creek Road and Dickson Road through Stoney Creek Indian Reserve 1		6,200.00	
Yellowhead Highway 16 through Canadian National Railways right of way (Plan 1160) in part DL 620, R. 5, Coast District		1,375.38	31,966.33
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Aitken Road 241		2,575.00	
Anderson Road 172		120.00	
Colleymount Road 21		35,920.00	
François Lake Road		4,716.07	
Howells Road 117		1.00	
Kelway Road		1.00	
Lewis Road 159		1,888.00	
Mapes Road 116		614.40	
Moe Road 156		1,705.00	
Ootsa-Nadina Road 90		2,120.00	
Palling Road 887		5,745.00	
Perow Loop Road 63		1,350.00	
Rose Lake Cut-off Road 19		5,540.00	
Sackner Road 128		13.50	
Sob Lake Road 102		11,442.99	
West Decker Road 80		3,907.00	
Westman Lake Road 339		3,345.00	
Yellowhead Highway 16		91,302.13	
Yellowhead Highway 16, Houston—8th Street		130,050.00	302,356.09
Total, Omineca District			19,862,778.75

PRINCE GEORGE NORTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,075,341.21
Snow removal			1,243,242.55
Maintenance of bridges			111,005.08
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0140—Minor betterments, machine patch			
Bear Lake area, Highway 97	128,718.58		
Miscellaneous	152,742.80	281,461.38	
C-0861—Norman Lake Road, clear and construct		29,086.00	
C-4181—Miscellaneous school bus and feeder routes, Prince George, reconstruction, ditching and gravelling (see also Prince George South)		211,542.21	
C-0961—15 pits, gravel pit reclamation		13,087.87	
W-0356—Fencing Schedule 2 Highways		11,277.55	546,455.01
Construction Branch			
Project C-0102—Highway 97, John Hart Highway, Summit Lake By-pass, construction		2,795,446.22	
C-2792—Hart Highway 97, Nechako River to Chief Lake Road		5,539,494.63	8,334,940.85
Traffic Branch			
Project E-0716—Route 97 (Hart Highway), Prince George, Nechako River to Chief Lake Road, lighting and signal installation			165,491.06
Bridges and Ferry Landings			
Day Labour			
Project B-1002—Gravel Creek, Beaver Dam and Old Fraser River Bridge (see also Prince George South)			46,674.51
Bridge Branch			
Project B-0937—Parsnip River Bridge, Hart Highway 97, cleaning and painting all steelwork and fences			91,790.00
Paving Branch			
Project S-0084—Miscellaneous surface seals, Highway 97, McLeod Lake–Honeymoon Creek Bridge, km 112–km 182.4		615,925.90	
S-4101—Prince George area, west of Fraser River, miscellaneous roads		11,908.33	627,834.23
Municipal Programs Branch			
Amalgamation Grants			
Project O-4552—Arterial Highway widening, Highway 97, John Hart, City of Prince George			342,538.05
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Chief Lake Road to Parsnip River		58,924.95	
Hart Highway from Prince George to Chief Lake Road Junction		881.00	
John Hart from Parsnip River to Pine Pass		9,023.47	
Minor road surveys		312.00	69,141.42
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Chief Lake Road, 225		410.50	
Foothills Blvd., Otway Road to North Nechako Road		144,445.00	
Hart Highway 97, Knell Road to Chief Lake Road		25,973.50	
Hart Highway 97, Nechako River to Knell Road		5,132.10	
Kinney Road 266		2.00	
Ness Lake Road 250		11,016.64	
Old Summit Lake North Road 272		1,820.00	
Reid Lake Road 240		634.60	189,434.34
Total, Prince George North District			12,843,888.31

PRINCE GEORGE SOUTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			5,082,096.81
Snow removal			3,010,855.18
Maintenance of bridges			429,369.07
Maintenance and operation of ferries—Isle Pierre Ferry			30,127.65
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0140—Minor betterments, miscellaneous		266,530.87	
C-0141—Minor betterments, miscellaneous		37,066.72	
C-0145—Minor betterments, miscellaneous		226,212.07	
C-0524—Highway 16 at Tête Jaune Cache, machine patching		90,000.00	
C-0526—Section 6 roads, McBride, survey and draw plans (see also Kamloops)		4,943.49	
C-0862—Tabor Lake East Road, construct new road for access to Tabor Grove Burn recreation area		30,508.75	
C-0877—Mount Robson Road		59,487.48	
C-0878—Blackman Road at Tête Jaune, upgrade		77,177.77	
C-0879—Mountainview Road, northwest of McBride, relocate		49,648.29	
C-0880—Miscellaneous school bus routes, McBride District, gravel (see also Kamloops)		44,626.12	
C-0936—Queensway Arterial, reconstruction		165,517.00	
C-1071—Terry Fox Mountain, viewpoints		19,999.00	
C-1137—Mount Terry Fox, construction of viewpoint and rest area		96,000.00	
C-1149—Highway 16, Redpass area, replacing guardrail		10,242.00	
C-4180—Upper Fraser Road, construct, gravel and clear right of way		499,599.49	
C-4181—Miscellaneous school bus and feeder routes, Prince George, reconstruction, ditching and gravelling (see also Prince George North)		211,542.21	
C-4184—Longworth Access Road, construct extension to Longworth Crossing		20,508.85	
C-4237—Eddie Road, reconstruction of multiplate culverts and railroad crossings		104,201.34	
D-0959—25 miles west of Prince George, gravel pit reclamation		21,306.46	
N-0429—Guardrail installation		84,424.50	
N-0434—Guardrail installation		14,917.00	
N-1068—Highway 16 at Moose Lake, guardrail installation		74,955.50	
W-0356—Fencing Schedule 2 Highways		12,716.90	
W-0357—Fencing Schedule 2 Highways		9,582.98	
W-0361—Fencing Schedule 2 Highways		29,736.28	2,261,451.07
Traffic Branch			
Project E-0593—Various installations, McBride, Route 5, Tête Jaune Cache and Route 16, lighting and flashing beacon installation		36,615.60	
E-0613—Route 16 at Vance/Cowart Roads, Prince George, signal installation and lighting revision		14,738.20	
E-0926—Route 16 at Range Road, Prince George, lighting installation		11,540.90	
E-1087—Route 5 (Yellowhead Highway) at 5th Ave./Pine Road, Valemount, lighting installation		13,415.60	76,310.30
Bridges and Ferry Landings			
Day Labour			
Project B-1002—Gravel Creek, Beaver Dam and Old Fraser River Bridge (see also Prince George North)		46,674.49	
B-1007—Sand Creek and Dunster Bridge		93,292.70	139,967.19
Ferries			
Project H-0924—Penny Aerial Ferry Proposal			2,021.90

PRINCE GEORGE SOUTH DISTRICT—*Continued*

	$	$	$
Paving Branch			
Project S-0084—Miscellaneous surface seals, medium cover aggregate and crushed granular surfacing in stockpile, Prince George, Bednesti Lake area	91,718.77		
Road graded seal, McBride: McBride miscellaneous roads (34.8 km)	304.05		
Road graded seal, McBride: Valemount southward (12 km)	337.32		
Shoulder seal, McBride: McBride eastward (24.6 km)	520.68	92,880.82	
S-0642—Highway 16, Tête Jaune to Moose River Bridge		4,377,302.30	
S-4102—Miscellaneous roads, Prince George area east of Fraser River		35,448.49	4,505,631.61
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Foothills Road, Otway Road to Chief Lake Road		18,337.54	
Highway 16, Prince George Airport Hill		21,193.11	
Highway 97 at B.C.R. industrial site, Prince George		2,262.59	
Minor road surveys		312.00	
Prince George, 5th Avenue interchange with Highway 97		88,129.84	130,235.08
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Queensway-Prince George through Lots 1 to 8 inclusive, Bk. 33, DL 933, Cariboo		723.08	
Statutory right of way for highway, Queensway Street through part of Bks. 32, 34 and 35, Plan 727, DL 933, Cariboo District Drawing 2444-A8-B		1,639.48	2,362.56
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Alpine Drive 1046		2,194.50	
Cariboo Highway, Fraser River Bridge interchange		20,500.00	
Dore River Road 565		878.71	
Graveburn Road 4040		4,614.89	
Highway 97 and Jenks Road		1.00	
Mountain View Road 544		1,960.00	
Pinko Road 165		318.50	
Queensway Street		1,156.52	
Sundry expenses		462.98	
Upper Fraser Road 458		16,096.80	
West Lake Fraser River Road 330		7,273.75	55,457.65
Total, Prince George South District			15,725,886.07

PRINCE RUPERT DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,394,351.56
Snow removal			436,189.08
Maintenance of bridges			143,491.98
Maintenance and operation of ferries—			
Queen Charlotte Islands ferry—Aliford Bay—Skidegate (*M. V. Kwuna*)		1,097,415.94	
Prince Rupert ferry subsidy (Dodge Cove)		15,960.00	
Misty Islands ferry subsidy		33,000.00	1,146,375.94
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0147—Minor betterments, miscellaneous	77,815.20		
Skidegate Ferry landing loop	138,623.34	216,438.54	
C-0886—Towhill Road, Queen Charlotte Islands, slide repair at Chown River		67,484.93	
N-0390—Guardrail installation		24,828.00	308,751.47
Construction Branch			
Project C-4483—Prince Rupert–Ridley Island, construction			4,948,162.09
Bridges and Ferry Landings			
Day Labour			
Project B-1299—McClymont and Galloway bridges, fence painting			18,586.76
Bridge Branch			
Project B-0697—Ridley Island overhead			517,376.86
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Fairview Bay to Prince Rupert		8,623.20	
Prince Rupert to Ridley Island		143.04	8,766.24
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Referencing and re-establishing survey monuments, Second Avenue, Prince Rupert, First and Ninth Street		1,944.99	
Legal survey through part of DL 2797, Queen Charlotte District		1,517.10	3,462.09
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Masset Road 114		1.00	
Queen Charlotte Highway, Masset Road 33		2,025.91	2,026.91
Total, Prince Rupert District			8,927,540.98

RICHMOND DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			921,219.57
Snow removal			36,048.41
Maintenance of bridges			403,322.85
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, miscellaneous			20,246.45
Construction Branch			
Project C-3325—George Massey Tunnel, Highway 99, installation of sprinkler system (see also Delta)			10,694.94
Traffic Branch			
Project E-0280—Route 99, Massey Tunnel, reversible lane, electrical and signing (see also Delta)		2,667.49	
E-0811—Sea Island Way at Garden City, Richmond, signal revision		41,033.35	43,700.84
Roadside Development and Landscape Branch			
Project D-0938—Knight Street Bridge, irrigation installation			20,472.52
Bridges and Ferry Landings			
Day Labour			
Project B-1016—Oak Street Bridge, replace bridge rail posts (see also Vancouver South)			25,000.01
Paving Branch			
Project S-0035—Highway 99 and Sea Island Highway, Oak Street to George Massey Tunnel (see also Delta)			832,405.04
Design and Survey Branch			
Surveys Generally—Project L-0101—			
B.C. Ferry Route 2 from Iona Spit to Highway 99		6.02	
Highway 95 and 5 Interchange		4,972.90	4,978.92
Bill 7			
Project L-0558—Fraser River Crossing (Annacis Island), Westminster Highway, Knight Street to Hamilton Road			10,263.87
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Plan of Statutory right of way for Highway 99 widening in remainder of Sec. 31, Blk. 4N R5W, NWD, Drawing 50 38R/W			772.38
Geotechnical and Materials Branch			
Bill 7			
Project G-0038—Fraser River Crossing (Annacis Island), geotechnical investigations (see also Delta and New Westminster)			133,169.19
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Knight Street Bridge, roadwork			1,566,225.00
Total, Richmond District			4,028,519.99

ROSSLAND-TRAIL DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,365,516.92
Snow removal			1,205,054.00
Maintenance of bridges			50,741.09
Maintenance and operation of ferries—Castlegar Ferry			224,594.65
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0132—Minor betterments, miscellaneous	131,982.12		
Miscellaneous, Fruitvale	55,571.74	187,553.86	
C-0836—Trail Creek-Wellington Street, install second culvert		78,871.05	
C-0837—Miscellaneous roads and turn slots, Rossland District, paving		251,491.00	
N-0382—Guardrail installation		60,144.26	578,060.17
Highway Safety Branch			
Project C-0204—School route improvements, shoulder widening and paving, Old Salmo Road		17,996.00	
C-0205—General safety works, paved shoulders and guardrail installation, Columbia Gardens Road, Fruitvale		9,155.00	27,151.00
Traffic Branch			
Project E-1111—Route 3B/22 at Thompson Avenue, Rossland, lighting installation			6,557.00
Bridges and Ferry Landings			
Day Labour			
Project B-0254—Castlegar Ferry ramps, construction, replace with fill		99,576.34	
B-1146—Waneta Bridge, redecking		17,233.16	116,809.50
Bridge Branch			
Project B-1369—Beaver Creek Bridge, Trail–Salmo Highway			3,528.00
Paving Branch			
Project S-0084—Miscellaneous surface seals, road chip seal, Rossland: Highway 3B, Rossland–Nancy Green Lake Road (28 km)		243.98	
S-0646—Highway 3, Paulson Bridge to Kinnaird Overpass		4,235,107.61	4,235,351.59
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0730—129B, Columbia Gardens Road, Village of Fruitvale		11,724.18	
V-1136—285B, Warfield Hill, City of Trail		5,500.00	17,224.18
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Castlegar interchange		7,521.00	
Castlegar–Pass Valley (Pass Creek Road)		93,467.36	
Highway 3A and 22 from Earl Street to St. Paul Street		7,161.02	
Highway 3A from Glenmerry to Montrose		2,431.00	
Highway 3A from Tadanac to Trail		212,323.13	
Minor road surveys		3,966.91	
Murphy Creek, Highway 22, relocation		507.03	327,377.45
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Subdivision Plan of Lot 1, Plan 5433, DL 4598 KD, Trail, B.C.		1,707.00	
Trail-Waneta Highway 22, S. Bdy., Lot 205A to N. Bdy., Blk. 26, Lot 205, Tp. 7A, Kootenay District, 3.5 km		11,937.89	13,644.89

ROSSLAND-TRAIL DISTRICT—*Continued*

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Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Highway 3B		10,909.00	
Kooznetsoff Road 284		1.00	
Little Slocan South Road 105		1,462.00	
Mountain Street, Road 80		1,672.78	
Old Erie–Sayward Wagon Road		425.00	
Southern Trans-Provincial Highway 3		2,512.71	
Southern Trans-Provincial Highway 3, Kinnaird Interchange		132,000.00	
Southern Trans-Provincial Highway, Glenmerry–Montrose		28,545.80	
Statts Road 93		8,974.30	
Trail–Tadanac Highway		339,841.59	526,344.18
Total, Rossland-Trail District			8,697,954.62

SAANICH AND THE ISLANDS DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,309,773.56
Snow removal			304,427.34
Maintenance of bridges			101,311.18
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous		10,009.61	
C-0153—Minor betterments, miscellaneous		159,060.84	
C-0582—Beaver Point at Fulford, Ganges, intersection improvement		20,000.00	
C-0911—Fulford-Ganges intersection, realignment and channelization		55,171.29	
C-0915—Mt. Belcher Heights, pave		12,443.55	
C-1010—Highway 17, Pat Bay Highway, Royal Oak Interchange, bus stops		19,035.43	
N-0396—Guardrail installation		24,481.88	300,202.60
Construction Branch			
Project C-3121—Blanshard Street extension, Victoria			66,455.32
Highway Safety Branch			
Project C-0206—Demonstration projects, configuration "F" C.M.B. testing			1,055.00
Traffic Branch			
Project E-0577—Route 17A at Wilkinson Road, Saanich, lighting and signal installation			5,899.00
Roadside Development and Landscape Branch			
Project D-0095—John Road Highways Yard, landscape development			44,458.20
Bridges and Ferry Landings			
Bridge Branch			
Project B-1274—Vernon Avenue overhead, C.N. Railway overpass, Seymour Avenue, Patricia Bay Highway			3,270.22
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0764—237B, Quadra Street, District of Saanich		29,300.00	
V-0797—121B, Keating Cross Road, District of Central Saanich		295,066.84	
V-0798—192B, McTavish Road, District of North Saanich		11,007.00	335,373.84
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Durrance Lake Road, relocation (Hartland Road-Durrance Lake)		7,498.52	
Helmcken Road-Wilkinson Road		333.00	
McKenzie Avenue from Trans-Canada Highway (Victoria outlet) to Highway 17 (Pat Bay Highway)		29,691.60	
Minor road surveys		10,401.68	
Pat Bay Highway, Beacon Avenue interchange		51,895.73	99,820.53
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Beddis Road, W. bdy., Parcel E., NW. ¼, Sec. 87 to E. bdy., Sec. 76, south Saltspring Island, File: LS Saltspring 57		5,492.44	
Canal Road right of way in Lot 3, Plan 22618, Sec. 11, North Pender Island and reposting corners, Lot 7, Plan 1695, Sec. 7		2,564.36	
Clanton Road through part of the remainder of Lot 33, Galiano Island, Dwgs. R6-10-02 and 03, File: LS Galiano 11		1,364.64	
McKenzie Avenue extension, Highway 17 to Trans-Canada Highway		7,791.53	
Statutory right of way for highway, Otter Bay and South Otter Bay Roads, in part of Sec. 18, Pender Island, Cowichan District		4,000.00	21,212.97

SAANICH AND THE ISLANDS DISTRICT—*Continued*

	$	$	$
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Blanshard Street extension		295,493.20	
Kelly Road extension		2,090.00	
McKenzie Avenue extension		207,845.59	
Morningside Road, Saltspring Island		29.20	
Pat Bay Highway and Sayward Road		201,000.00	
Wilfert Road extension		105,722.12	812,180.11
Total, Saanich and the Islands District			4,405,439.87

SHUSWAP-REVELSTOKE DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			4,578,116.57
Snow removal			3,018,847.21
Maintenance of bridges			355,372.95
Maintenance and operation of ferries—			
Shuswap Lake Ferry		24,000.00	
Upper Arrow Lakes Ferry		1,343,053.79	1,367,053.79
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0124—Minor betterments, Salmon Arm area, gravelling and ditching	62,395.16		
Miscellaneous	176,970.42	239,365.58	
C-0125—Minor betterments, miscellaneous		39,471.10	
C-0138—Minor betterments, miscellaneous		193,728.68	
C-0468—Grandview Bench Road, reconstruction		99,471.69	
C-0816—Sundry Roads in the Salmon Arm District, improvements		25,498.98	
C-0817—Trans-Canada Highway in Salmon Arm District, Gradall ditching		99,999.97	
C-0818—Trans-Canada Highway and Power Avenue, construct left turn slot		62,995.53	
C-0819—Miscellaneous roads in the Salmon Arm District, pavement patching		176,952.08	
C-0820—Miscellaneous roads in the Salmon Arm District, gravelling		169,991.04	
C-0829—Miscellaneous roads in the Vernon District, paving (see also Okanagan North)		99,993.24	
C-0830—Section 4 roads in the Vernon District (see also Okanagan North)		39,828.99	
C-0850—Trans-Canada Highway 1, McDonald snowshed, remove debris		20,556.00	
C-3755—Highway 31, Balfour–Galena Bay, reconstruct		199,978.00	
D-0009—Shelter Bay, Galena Bay and Needles, rest area upgrading		77,493.26	
D-0765—Rest area upgrading, Red Hill, Carquille, Mara Lake and Last Spike rest areas (see also Yale-Lillooet)		16,667.76	
D-1094—Clancy Gravel Pit, reclamation		15,000.00	
N-0374—Guardrail installation		59,994.23	
N-0388—Guardrail installation		74,244.03	
W-0345—Fencing Schedule 2 Highways		44,471.21	
W-0346—Fencing Schedule 2 Highways		1,490.20	1,757,191.57

SHUSWAP-REVELSTOKE DISTRICT—*Continued*

	$	$	$
Construction Branch			
Hydro Development			
Project C-3936—Highway 23, Revelstoke-Mica relocation, Sta. 840 + 52.08 to 908 + 69.366 (6.82 km)		8,129,709.63	
C-3937—Highway 23, Revelstoke-Mica relocation, Revelstoke Dam to LaForme Creek section (14.48 km to 20.57 km)		94,946.12	
C-3938—Highway 23, Revelstoke-Mica relocation, Revelstoke Dam to LaForme Creek section (20.57 km to 27.52 km)		47,566.41	
C-3939—Highway 23, Revelstoke-Mica relocation, construction Sta. 280 + 00 to Sta. 331 + 70 (5.2 km)	14,516.00		
Construction Sta. 331 + 70 to Sta. 349 + 15 (1.7 km)	16,004.58	30,520.58	
C-3940—Highway 23, Revelstoke-Mica relocation, LaForme Creek to Downie Creek section (35.1 km to 38.9 km)		42,181.84	
C-3941—Highway 23, Revelstoke-Mica relocation, LaForme Creek to Downie Creek section (39.2 km to 46.6 km)		962,274.30	
C-3942—Highway 23, Revelstoke-Mica relocation, construction Sta. 470 + 60 to Sta. 586 + 12 (11.5 km)		330,101.08	
C-3943—Highway 23, Revelstoke-Mica relocation, LaForme Creek to Downie Creek section, Sta. 586 + 13.7 to Sta. 660 + 30		2,031,901.13	
C-3958—Highway 23, Revelstoke-Mica relocation, LaForme Creek to Downie Creek section, Sta. 661 + 21 to Sta. 743 + 50		3,029,543.10	
C-3959—Highway 23, Revelstoke-Mica relocation, Downie Creek to Mica Creek Townsite (91.7 km to 96.8 km) Sta. 917 + 00 to Sta. 955 + 04 (3.8 km)		23,510.47	
C-3960—Highway 23, Revelstoke-Mica relocation, Downie Creek to Mica Creek Townsite section (107.2 km to 116.3 km)		5,603,881.93	
C-3961—Highway 23, Revelstoke-Mica relocation, Downie Creek to Mica Creek Townsite section (118.3 km to 125.2 km)		879,068.04	
C-3962—Highway 23, Revelstoke-Mica relocation, Downie Creek to Mica Creek Townsite section (125.5 km to 132.5 km) (6.1 km)		2,444,555.83	23,649,760.46
Highway Safety Branch			
Project C-0202—Roadside hazard elimination, moving telephone poles from right of way, Enderby to Ashton			12,000.00
Traffic Branch			
Project E-0418—Old Columbia River Bridge, Revelstoke, lighting and signal installation		394.54	
E-0690—Route 1 at 10th Avenue (Rotten Row), Salmon Arm, lighting installation		17,717.00	
E-0813—Fourth Street at Downie Street, Revelstoke, pedestrian signal installation		11,941.42	
E-1112—Route 5 at Summit Drive, Kamloops and Route 1 at Gleneden Road First Avenue SW., Salmon Arm, lighting installation (see also Kamloops)		3,428.00	33,480.96
Bridges and Ferry Landings			
Day Labour			
Project B-1000—Trout Lake, Armstrong Lake and Columbia River Bridges		90,763.35	
B-1027—Freeman Bridge		49,989.77	
B-1154—Enderby Temporary Bridge		155,300.87	296,053.99
Bridge Branch			
Project B-0551—Enderby Bridge, over Shuswap River, Mable Lake Road		421,474.25	
B-1176—Eagle River at Kay Falls, Trans-Canada Highway		19,000.00	440,474.25

SHUSWAP-REVELSTOKE DISTRICT—*Continued*

	$	$	$
Hydro Development			
Project B-0796—Highway 23, Revelstoke–Mica relocation, Carnes Creek and LaForme Creek Bridge Decks		1,867,677.42	
B-1079—Highway 23, Revelstoke–Mica relocation, Downie Creek and Mars Creek Bridges		27,850.44	
B-1232—Highway 23, Revelstoke–Mica relocation, LaForme Creek, Bridge		509,146.49	
B-1233—Highway 23, Revelstoke–Mica relocation, Carnes Creek Bridge		926,895.85	
B-1234—Highway 23, Revelstoke–Mica relocation, Mars Creek Bridge (including Holdick Creek removal)		2,606,626.83	
B-1235—Highway 23, Revelstoke–Mica relocation, Bigmouth Creek Bridge		371,449.10	
B-1265—Highway 23, Revelstoke–Mica relocation, Downie Creek Bridge		34,578.02	6,344,224.15
Ferries			
Project H-0258—*M.V. Galena*, Upper Arrow Lakes Ferry, spare propulsion unit			81,056.08
Paving Branch			
Project S-0034—Highway 23, Revelstoke–Mica relocation, Downie Creek to Bigmouth Creek section		1,799,217.00	
S-0084—Miscellaneous surface seals, Yankee Flats Road and Heywood–Armstrong Road (10.4 km)	8,239.44		
Road Chip Seal, Half River–Galena Bay	87,445.60		
Highway 31—Galena Bay–Armstrong Lake, Trout Lake Road (16.0 km)	149,127.85	244,812.89	
S-0645—Highway 97, Pinaus Lake to Hanna Road		1,524,935.65	3,568,965.54
Hydro Development			
Project S-0034—Highway 23, Revelstoke–Mica relocation, Downie Creek to Bigmouth Creek section		264,782.65	
S-1009—Highway 23, Revelstoke–Mica relocation, Martha Creek to Carnes Creek		1,908,880.99	
S-1063—Highway 23, Revelstoke–Mica relocation, Mars Creek to Downie Creek		15,842.59	2,189,506.23
Municipal Programs Branch			
Amalgamation Grants			
Project O-1301—City of Revelstoke, amalgamation grant			800,000.00
Secondary Highway Construction and Improvements			
Project V-1166—24B, Auto Road, District of Salmon Arm		21,278.18	
V-1167—282B, Pine Street, Village of Chase		1,885.77	23,163.95
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Miscellaneous from Revelstoke East entrance		1,061.00	
Miscellaneous, Shuswap River Bridge at Enderby		14,425.31	
Highway 97 to Crosier Road, Swan Lake Junction (see also Okanagan North)		9,873.84	
Improvement of west intersection at Revelstoke		4,641.06	
Mabel Lake Road from Enderby to Mabel Lake		7,676.85	
Highway 97A from Highway 1, Sicamous to Mara (via east side of Mara Lake)		20,782.62	
Minor road surveys		6,805.05	
Salmon Arm Grid Roads		192.00	
Salmon Arm from Shuswap to 40th Street north east on Highway 1		45,704.63	
From Revelstoke to Mica Dam		100.00	
Highway 31, Gerrard to west side of Trout Lake (see also Nelson-Creston)		22,695.96	
3 Valley Gap		374.00	134,332.32

SHUSWAP-REVELSTOKE DISTRICT—*Continued*

	$	$	$
Hydro Development			
Project L-3889—Highway 23, Revelstoke–Mica relocation, Revelstoke Dam site to LaForme Creek Section 1 (8.0 km to 27.5 km)		1,549.25	
L-3890—Highway 23, Revelstoke–Mica relocation, LaForme Creek to Downie Creek Section 2, (29.0 km to 60.3 km)		1,563.09	
L-3891—Highway 23, Revelstoke–Mica relocation, Goldstream Creek to Mica Village Section 3 (91.7 km to 132.6 km)		1,193.21	4,305.55
Legal Surveys Office			
Legal Surveys—Project L-0099—			
520 Airport Way through part of LS 15, Sec. 14, Tp. 23, R. 2, W6M, Dist. Dwg. 18-185		754.50	
544 Camozzio Road in parts of Secs. 13 and 14, Tp. 23, R. 2, W6M, K.D. (0.7 km), Dist. Dwg. 18-162		4,200.00	
Explanatory Plan of Trans-Canada Highway through part of Secs. 29, 32 and 33 in Tp. 23, R. 2, W6M		370.00	
Reference Plan through Fractional SW. ¼ Sec. 9 and Lot 1, Plan 8792, SW. ¼ Sec. 9, Tp. 23, R. 10, W6M, (Dist. Dwg. D-148-2), Meadow Creek Road 148, Celista		726.40	
Rights of way Plan through NW. ¼ of LS 1, Sec. 20, Tp. 22, R. 7, W6M, Kootenay District and plan of subdivision consolidating remainder of NW. ¼ LS 1 with Lot 12, Plan 9067		833.98	6,884.88
Geotechnical and Materials Branch			
Hydro Development			
Project G-0428—Highway 23, Revelstoke–Mica relocation, geotechnical investigations			44,961.27
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
29 Coell–Jones Road		1,257.22	
201 Begbie Road		17,850.00	
Airport Way Road 520		65,022.00	
Big Eddy Road 213		17,000.00	
Blatchford Road 616		4,505.00	
Davies Road		17,822.22	
Dunne Road 112		5,000.00	
Ford Road 36		2,000.00	
Freeman Road 422		12,500.00	
Frontage Road *re* Duck Lake Indian Reserve 7, Spallumcheen Band		1,200.00	
Grindrod–Salmon Arm Highway 97B		30,000.00	
Hazelhurst Road 221		9,362.50	
Henstridge Road 130		27,275.00	
Hepburn Road 198		11,371.00	
Highway 97A		10,000.00	
Kamloops–Shuswap Road		3,000.00	
Lee Creek Drive 854		1.00	
Mt. Begbie Road 201		4,096.50	
Mychulac Road 205		600.00	
Notch Hill Road 410		40,324.75	
Okanagan Highway 97A		12,456.60	
Pinantan Road 227		4,886.00	
Rauma Avenue 237 and Trans-Canada Highway		84,000.00	
Riverside Road 178		1.00	
Sorrento–Eagle Bay Road		2.00	
Squilax–Anglemont Road 446		4,098.00	
Sunnybrae-Canoe Point Road 28		5,519.00	
View Road 99		16,500.00	
Yankee Flats Road 363		1,000.00	408,649.79
Hydro Development			
Project P-0037—Highway 23, Revelstoke–Mica relocation, right of way purchases			11,124.60
Total, Shuswap-Revelstoke District			49,125,526.11

SKEENA DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			5,274,210.67
Snow removal			1,927,532.51
Maintenance of bridges			391,639.76
Maintenance and operation of ferries—Usk Ferry			103,665.45
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0148—Minor betterments, miscellaneous		195,234.19	
Project C-0150—Minor betterments, Smithers local roads, prepare for paving	82,227.58		
Miscellaneous	185,697.97	267,925.55	
C-0176—Old Lakelse Lake Road, reconstruction		365,475.00	
C-0497—Babine Lake Road, reconstruct		504,657.28	
C-1089—Route 37 at Kitwancool, slope stabilization		39,736.78	
D-0965—Highway 16, Sanderson Point, new rest area		29,966.00	
D-0966—Kitwancool, new rest area		9,333.00	
D-0967—Telegraph Point, new rest area		40,000.00	
D-0968—Burns Lake rest area, guardrail and upgrading		10,715.00	
D-0969—Research project, cost comparison trials of mechanical and hand control of noxious weeds versus chemical control		30,000.00	
D-4277—Highway 37, Kitwanga Highway extension, new rest area development, 2 sites (see also Atlin)		10,137.50	
N-0391—Guardrail installation		39,138.00	
N-0392—Guardrail installation		51,672.55	
W-0363—Fencing Schedule 2 Highways		35,143.63	1,629,134.48
Construction Branch			
Project C-0253—Highway 16, Kasiks-Backwater Creek (Yellowhead Highway)		4,752,128.70	
C-3320—Kitwanga to DL 1206, mileage 12.82		9,463.95	
C-3719—Highway 37, Kitwanga to Meziadin Lake, construction		207,314.55	4,968,907.20
Traffic Branch			
Project E-1060—Smithers, various lighting and installation revisions, Route 16 at King Road, Route 16 at Tatlow Road		85,530.23	
E-1062—Old Skeena River Bridge, Terrace, signal revision and lighting installation		38,737.70	124,267.93
Bridges and Ferry Landings			
Day Labour			
Project B-1023—Wawelth Bridge		25,429.85	
B-1083—Terrace Bridge, redecking		321,009.48	
B-1300—Kitimat Village bridges		54,000.00	400,439.33
Bridge Branch			
Project B-0426—Lean-to Creek Bridge, Kalum Lake Road		87,427.20	
B-0778—Terrace South Bridge		5,732.35	
B-0808—Terrace Bridge, redeck and painting		162,877.80	
B-1197—Terrace-Prince Rupert bridges, Backwater Creek, East Kwinitsa Creek, Log Creek, Snow Creek and Swamp Creek bridges, Yellowhead Highway		30,545.00	
B-1328—Moonlit Creek Bridge, Kitwanga-Meziadin Lake, Highway 37		4,678.65	
B-1383—Yellowhead Highway 16: Slickenside Creek Bridge, Polymar Creek Bridge, Snowbound Creek Bridge		340,407.69	631,668.69

SKEENA DISTRICT—*Continued*

	$	$	$
Paving Branch			
Project S-0640—Highway 16, New Hazelton-Mudflat (including Kispiox Road intersection 16 Kzan)		3,162,672.98	
S-5201—Highway 16, Khyex River, Backwater Creek		1,690,281.25	4,852,954.23
Municipal Programs Branch			
Amalgamation Grants			
Project O-0927—New Hazelton, maintenance of annexed area, amalgamation grant			450,000.00
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Carnaby Crossing to Kitsequeda, Yellowhead Highway 16 West		6,027.70	
Highway 16 and Kathlyn Lake Road		6,781.05	
Kitimat Industrial Road (Eurocan)		17,483.98	
Kitwanga, Meziadin Lake from Kitwanga to DL 3401		18,120.96	
Shames, Lot 5621, Tyee		176,214.43	
Smithers Arterial from Bulkley River to Kathlyn Street		32,155.99	
Smithers, Telkwa Grid Road		7,463.60	
Smithers, Telkwa, Sec. 2, Region 4		966.63	
Terrace bypass		1,105.00	266,319.34
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Burnt Cabin Road 9 from Telkwa High Road to East Boundary, DL 883, R. 5, CD		623.20	
Kispiox Valley Road 49, through Gitamaax Indian Reserve 1 and Lot 505, R. 5, CD		14,338.70	14,961.90
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
3 Kalum Lake Road		2,000.00	
Bench Road 424		2,138.50	
Bruce Road 56		1,105.00	
Burnt Cabin Road 9		1,650.00	
Johnson Road		3,192.00	
Newell Avenue 195		4,500.00	
Northern Trans-provincial Highway, Cow Creek revision		1,451.37	
Old Lakelse Lake Drive 53		11,443.35	
Owens Road 25		5,630.60	
Palmeson Road 109		3,500.00	
Railway Avenue Extension 416		699.75	
Sundown Road 251		1,653.60	
Telkwa High Road 107		481.00	39,445.17
Total, Skeena District			21,075,146.66

SOUTH PEACE RIVER DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,863,929.46
Snow removal			2,531,121.00
Maintenance of bridges			220,537.07
Maintenance and operation of ferries—Clayhurst Ferry			284,591.29
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0142—Minor betterments			
Construction and gravelling, various roads	159,549.09		
Miscellaneous	199,831.62	359,380.71	
C-0163—John Hart Highway 97, improvements and major pavement patching		99,612.59	
C-0164—Heritage Highway, Grizzly Valley Circle Route, construction and reconstruction in preparation for paving		3,948,505.11	
C-0868—Jackfish Lake Road, reconstruct		153,366.80	
C-0869—Highway 97, south approach, Taylor Bridge, widening and guardrail installation		87,495.00	
C-0871—Fellers Heights Road, gravelling, grading, dust control		209,959 27	
C-2286—Substandard roads in Dawson Creek District, reconstruction		386,664.42	
N-0431—Guardrail installation		43,176.00	
W-0358—Fencing Schedule 2 Highways		70,561.20	5,358,721.10
Construction Branch			
Project C-0745—North East Coal Development Road, Martin Creek to Upper Martin Creek		71,506.68	
C-0748—North East Coal Development Road, Bullmoose Creek to Tumbler Ridge west		3,115,183.19	
C-0749—North East Coal Development Road, Bullmoose Creek to Tumbler Ridge east, construction		3,545,277.44	
C-4513—North East Coal Development Road, Highway 97 to Martin Creek		4,986,296.46	11,718,263.77
Highway Safety Branch			
Project C-0205—General safety works—			
Delineation, Route 97 at East Pine Bridge		1,567.00	
Delineation, Route 97 at Peace Hill		1,742.00	3,309.00
Bridges and Ferry Landings			
Day Labour			
Project B-1004—One Island Bridge			85,828.50
Bridge Branch			
Project B-0725—North East Coal Development Road, Dickebusch Creek Bridge		445,669.70	
B-0977—North East Coal Development Road, Murray River Bridge		71,605.45	
B-0978—North East Coal Development Road, Wolverine Creek and Flatbed Creek bridges		144,015.69	
B-1031—Kiskatinaw River Bridge		14,656.66	
B-1393—Northeast Coal Development Road, Twidwell Bend Bridge		705,804.70	1,381,752.20
Paving Branch			
Project S-0084—Miscellaneous surface seals, km 58.62 to km 80.42, 6 km, Mt. Lemoray yard (km 68.81)			190,194.38
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0675—196B, Eighth Street, City of Dawson Creek			979.12

SOUTH PEACE RIVER DISTRICT—*Continued*

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Design and Survey Branch			
Surveys Generally—Project L-0101—			
B.C. Rail overpass, Highway 97, Chetwynd	42,977.33		
Hart-Wabi Hill truck lane at Chetwynd and West Pine truck lane	634.00		
Minor road surveys	26,293.32		
N. W. Wood Preservers Road, Flatbed Extention and Boundary Roads	1,335.88		
Peace River Bridge to South Approach Hill	6,083.77		
Teko Road, Septimus-Pine River Crossing	5,319.94	82,644.24	
L-1182—North East Coal Development Road, Highway 97 to Chamberlain Creek		108,790.97	
L-3424—North East Coal Development Road, Martin Creek to Gwillim Lake, Sec. 2 design		60,295.06	
L-3507—North East Coal Development Road, Gwillim Lake to Tumbler Ridge, Sec. 3 design		481,637.36	733,367.63
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Dawson Creek-Spirit River Highway 49 through SE. ¼, Sec. 13 at SW. ¼, Sec. 14, Tp. 78, Range 14, W6M, PRD		3,850.00	
Heritage Highway 52-Highway 2 to N. Bdy., Sec. 33, Tp. 27, PRD, 9.8 km		15,313.37	
Road 1, Alberta Boundary-Pouce Coupe, S. Bdy., NW. ¼, Sec. 10 to N. Bdy., Sec. 35, Tp. 26, Peace River District, 8.4 km, File LSR 4-43		2,690.65	21,854.02
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Business Frontage Road		775.00	
North East Coal Development Road, junction Highway 97 to Martin Creek		175,016.22	
Road 213 S		310.41	
Road 52, Heritage Highway		1,500.00	
Road 80, South Bear Mountain Community Pasture		285.80	177,887.43
Total, South Peace River District			25,572,335.97

SURREY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			1,360,053.24
Snow removal			139,432.53
Maintenance of bridges			89,531.54
Maintenance and operation of ferries—Barnston Island Ferry			329,664.98
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments			
Miscellaneous	82,272.20		
King George Highway, grind and pave	71,787.91	154,060.11	
C-0802—Scott Road at 70th Avenue, culvert replacement (see also Delta)		6,633.62	
C-0803—Route 15, 32nd to 40th Avenue, reshape, grade and profile		200,000.00	
C-1173—Highway 1 near Brunette Street and 152nd, excavate, re-gravel and re-pave failure areas (see also Maillardville-Coquitlam)		105,059.47	
N-0370—Guardrail installation		1,628.00	
W-0793—Fencing Schedule 2 Highways		27,186.20	494,567.40
Construction Branch			
Project C-3983—King George Highway 99A, Fraser Highway 1A to 62nd Avenue, reconstruction			20,050.05
Traffic Branch			
Project E-0279—Route 1A/99A Pattullo Bridge, lighting revision (see also New Westminster)		3,146.36	
E-0419—Route 1 at Stormont interchange, additional lighting		7,858.80	
E-0673—152nd at 108th (Ferguson Road), Surrey, lighting installation		56,719.46	
E-0810—Route 10 (56th Avenue) at 180th Street, Surrey, pedestrian signal installation		13,272.52	
E-1067—Route 99A at 24th Avenue, Surrey (King George Highway), signal and lighting installation		43,831.59	
E-1110—Route 10 at 128th Street and 132nd Street, Surrey, lighting installation		9,403.10	
E-1113—Route 1A/99A at 108th, Surrey, signal and lighting revision		58,635.81	
E-1128—Route 99 (King George Highway) at 72nd Avenue, Surrey, signal revision		21,475.58	
E-1130—Route 99A (King George Highway) at 96th Avenue, Surrey, signal revision		15,795.14	
E-7935—Route 1A, various intersections, Route 10 at 200th Street (Carvolth Road), signal and lighting installation		4,026.72	234,165.08
Bridges and Ferry Landings			
Day Labour			
Project B-1015—Port Mann Bridge, safety loaders, cages, railing (see also Maillardville-Coquitlam)		14,999.98	
B-1085—Barnston Island Ferry Landing, repairs		60,000.00	74,999.98
Bridge Branch			
Project B-1177—Port Mann Bridge, traffic barriers			14,520.00
Paving Branch			
Project S-1058—Port Mann Bridge deck, asphalt re-cap (see also Coquitlam-Moody)			12,021.05
Municipal Programs Branch			
Secondary Highway Construction and Improvements			
Project V-0766—182B (Johnston Road) at 152nd Street, District of Surrey			7,909.03

SURREY DISTRICT—*Continued*

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Design and Survey Branch			
Surveys Generally—Project L-0101—			
King George Highway from Whitehouse corner		98.00	
Minor road surveys		101.00	
Nicomekl River–64th Avenue on Highway 99A		29,700.35	
Port Mann Eastbound Weigh Scale site		10,308.22	
Scott Road from Highway 1 to Highway 10 (see also Delta)		1,095.46	
Scott Road, Old Yale Road to 96th Avenue (see also Delta)		810.94	
South end of Pattullo Bridge		16,394.22	58,508.19
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Scott Road and Bridge Road, Pattullo Bridge approach, Old Yale Road, King George Highway			231,362.61
Total, Surrey District			3,066,785.68

VANCOUVER CENTRE DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			292,766.36
Snow removal			24,017.48
Total, Vancouver Centre District			316,783.84

VANCOUVER EAST DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			148,669.25
Snow removal			30,598.98
Maintenance of bridges			1,553.38
HIGHWAY CONSTRUCTION—CAPITAL			
Design and Survey Branch			
Surveys Generally—Project L-0101— Cassiar Street			4,438.36
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113— Trans-Canada Highway 1, 2nd Narrows Bridge to First Street			107,513.86
Total, Vancouver East District			292,773.83

VANCOUVER-POINT GREY DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			150,852.16
Snow removal			15,800.61
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0119—Minor betterments, Chancellor Boulevard, curb and gutter			99,951.24
Construction Branch			
Project C-3912—16th Avenue and SW. Marine Drive on U.B.C. Endowment Lands, 4 laning			1,558,941.75
Total, Vancouver-Point Grey District			1,825,545.76

VANCOUVER SOUTH DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			82,676.12
Snow removal			1,360.32
Maintenance of bridges			18,778.36
HIGHWAY CONSTRUCTION—CAPITAL			
Bridges and Ferry Landings			
Day Labour			
Project B-1016—Oak Street Bridge, replace bridge rail posts (see also Richmond)			24,999.99
Total, Vancouver South District			127,814.79

VICTORIA DISTRICT

	$	$	$
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0122—Minor betterments, miscellaneous			3,896.61
Design and Survey Branch			
Surveys Generally—Project L-0101—			
Interchange at McKenzie Avenue and Patricia Bay Highway			2,526.00
Total, Victoria District			6,422.61

WEST VANCOUVER-HOWE SOUND DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			2,118,774.29
Snow removal			765,426.45
Maintenance of bridges			118,643.20
Maintenance and operation of ferries—Woodfibre Ferry			941,573.82
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0117—Minor betterments			
Miscellaneous	177,142.07		
Highway 99, machine patching	60,770.00		
Supply and erection of chain link fence, First Narrows Bridge and other minor projects	83,170.00	321,082.07	
C-0799—Whistler Roads and Pemberton Meadows Road (shoulders), prepare for paving		159,668.87	
C-1084—Highway 99, Tunnel Point slide, stabilization		135,476.93	
C-1093—Garibaldi Highway 99 and Bayshore development (Whistler), left turn channelization		30,000.00	
C-1168—Route 99, Squamish Highway, "M" Creek Bridge approaches		310,359.53	
C-3208—Garibaldi Highway 99, Alpine Drive at Whistler to Pemberton, gravel in preparation for paving		500,000.00	
D-0096—Tunnel Point rest area, installation of safety fence, guardrail, additional paving and additional landscaping		19,951.39	
D-0941—Highway 99, Callaghan Creek, new rest area		1,337.84	
N-0368—Guardrail installation		80,000.00	1,557,876.63
Construction Branch			
Project C-0252—Highway 99, Squamish-Pemberton Highway, Cheakamus Canyon section		7,080,658.00	
C-1091—Birkenhead Park access road, maintenance and upgrading		49,858.78	7,130,516.78
Bridges and Ferry Landings			
Day Labour			
Project B-0677—Golden Dreams Bridge		168,000.00	
B-1157—Highway 99, Strachan and Newman Creeks, slide and flood repairs		154,379.23	322,379.23
Bridge Branch			
Project B-0768—Westmount, 28th Street and Taylor Way, grade separation structures		213.46	
B-1147—"M" Creek Bridge, Garibaldi Highway 99		98,760.18	
B-1195—Rubble Creek Bridge, Brandywine Creek Bridge, Garibaldi Highway 99		1,687.97	100,661.61
Paving Branch			
Project S-0648—Pemberton Meadows Road and Portage Road		1,992,715.95	
S-0676—Garibaldi Highway 99, Highways salt shed to Alpine Meadows Road, Whistler Mountain area		25,387.60	2,018,103.55
Municipal Programs Branch			
Amalgamation Grants			
Project O-0981—Resort Municipality of Whistler, amalgamation grant		225,000.00	
O-1132—District of Squamish, amalgamation grant		140,000.00	365,000.00

WEST VANCOUVER-HOWE SOUND DISTRICT—*Continued*

	$	$	$
Design and Survey Branch			
Surveys Generally—Project L-0101—			
4-lane urban design from Mine Museum to Britannia Creek		9,066.90	
99 Brohm Lake to Whistler junction		42,687.10	
99 from Squamish to Cheekye		1,826.09	
Horseshoe Bay–Squamish		10,073.05	
Minor road surveys		9,694.57	
Mt. Currie–Duffie Lake		15,208.38	
Port Mellon–Squamish		2,404.27	
Squamish from cross sections for rock scaling Horseshoe Bay to Porteau Bluffs		3,285.71	
Whistler, four-laning West Road–Mons, Highway 99		116,606.71	210,852.78
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Pemberton Portage Road, S. Bdy., L 2681 to E. Bdy. L 1547, Lillooet District, 5.3 km			22,689.74
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
"M" Bridge approaches, Horseshoe Bay to Squamish		3,330.00	
Pemberton Portage Road		1,246,085.60	
Squamish–Pemberton Highway, Cheakamus Canyon section		1,727.00	
Upper Levels Highway and Taylor Way		25,000.00	1,276,142.60
Total, West Vancouver-Howe Sound			16,948,640.68

YALE-LILLOOET DISTRICT

	$	$	$
HIGHWAY MAINTENANCE			
Maintenance of roads			6,967,190.34
Snow removal			3,471,104.18
Maintenance of bridges			432,541.92
Maintenance and operation of ferries—			
Lytton Ferry		164,801.91	
North Bend Aerial Ferry		265,000.00	429,801.91
HIGHWAY CONSTRUCTION—CAPITAL			
Roads			
Day Labour			
Project C-0120—Minor betterments, miscellaneous		219,384.00	
C-0122—Minor betterments, miscellaneous		10,120.61	
C-0123—Minor betterments, miscellaneous		19,530.52	
C-0126—Minor betterments, miscellaneous		14,402.27	
C-0127—Minor betterments, miscellaneous	123,661.57		
Botannie Road, construction	60,415.73		
Coalmont Road, reconstruction	50,883.30	234,960.60	
C-0128—Minor betterments, miscellaneous		214,800.11	
C-0270—Gunn Lake Road, construction		60,738.63	
C-0271—Lillooet, pre-engineering surveys		49,128.44	
C-0472—Princeton area, miscellaneous roads, upgrading		82,274.45	
C-0476—Meadow Creek Road, construction		600,809.53	
C-0477—Lillooet area, miscellaneous roads, paving		110,747.63	
C-0805—Tower's subdivision, slide stabilization		50,000.00	
C-0806—Chilliwack, miscellaneous pavement patching (see also Chilliwack and Dewdney)		26,639.98	
C-0823—Trans-Canada Highway 1, Lillooet, road base repair and pavement patching		124,976.56	
C-0824—Highlands Valley Road, construction		115,210.42	
C-0825—Lillooet Goldbridge Road, gravelling		99,778.36	
C-0826—Highway 12B, Pavilion Overpass, construction, paving, fencing, and slide areas repairs		109,993.62	
C-3796—Highway 5, Princeton to Kamloops, reconstruct and pave		30,570.24	
C-4073—Lillooet bridge approaches, construct		24,799.10	
C-4170—Duffey Lake Road, gravelling and realignment		158,899.71	
D-0765—Rest area upgrading, Red Hill, Carquille, Mara Lake and Last Spike rest areas (see also Shuswap-Revelstoke)		16,667.71	
D-0943—Copper Creek Westbound rest stop		25,000.00	
D-0944—Hope Slide, rest area upgrading		12,141.39	
D-1078—North Bend Aerial Ferry, toilet installation		5,000.00	
N-0371—Guardrail installation		70,000.00	
N-0373—Guardrail installation		16,076.00	
N-0377—Guardrail installation		21,726.43	
N-0378—Guardrail installation		84,644.54	
N-0379—Guardrail installation		54,500.95	
W-0344—Fencing Schedule 2 Highways		1,488.00	
W-0348—Fencing Schedule 2 Highways		15,508.68	
W-0349—Fencing Schedule 2 Highways		31,547.25	
W-0350—Fencing Schedule 2 Highways		27,712.52	2,739,778.25
Construction Branch			
Project C-3760—Coquihalla Highway, Nicolum Creek to Peers Creek		604,303.25	
C-4370—Lillooet access road, including construction of metal bin retaining walls and protection of railway wye		770,293.85	
C-4477—Southern Trans-Provincial Highway 3, Nicolum Creek-West Boundary Manning Park, construction		3,361,064.86	
C-4478—Coquihalla Highway, Boston Bar Creek Summit to Dry Gulch, construction		4,590,479.74	
C-4521—Highway 3 at Hope, storm drainage		68,958.52	9,395,100.22

YALE-LILLOOET DISTRICT—*Continued*

	$	$	$
Highway Safety Branch			
Project C-0202—			
Roadside Hazard Elimination, guardrail installation, Fraser Canyon	48,484.00		
Southbound approach to Fraser River Bridge (delineation posts and painted markings)	7,999.58	56,483.58	
C-0203—Highway safety measures, left turn slots, Route 1 at King subdivision, Lytton		35,674.00	92,157.58
Traffic Branch			
Project E-0600—Lytton, Route 1 at Route 12 and Route 1 at Rancherie Road, lighting and flashing beacon installations			239.40
Bridges and Ferry Landings			
Day labour			
Project B-1030—Beaks Bridge		45,320.02	
B-1032—Yalakom and Baker Bridges (see also Cariboo)		69,354.53	114,674.55
Bridge Branch			
Project B-0609—Eleven Mile Creek Bridge and Nicolum Creek Bridge, Southern Trans-Provincial Highway 3, 4 laning		535,628.98	
B-1192—Lillooet Bridge		283,077.70	
B-1362—Pavilion Overhead Bridge, Glenfraser Overhead Bridge, Cache Creek Highway		47,884.19	866,590.87
Ferries			
Project H-1372—North Bend Aerial Ferry, re-cabling and modifications			230,227.35
Paving Branch			
Project S-0084—Miscellaneous surface seal			
Mamit Lake Road, 8-Poley Road-Lower Nicola Street and Collettville Street (26.4 km)	472.90		
Miscellaneous sections, km 17-km 71.8	203,698.59		
Road graded seal, Lillooet, miscellaneous roads (55.2 km)	11.50		
Road graded seal, Loon Lake Road (beginning of 1979 drum mix to end of pavement)	46.00	204,228.99	
S-0085—Miscellaneous drum mix			
Lillooet, 12 Crown Lake Road (21 km)	155.32		
Lillooet Airport	220,951.81	221,107.13	
S-0652—Schedule I: Evergreen Drive and Cheam Avenue, Agassiz. Schedule II: Highway 9, north of Agassiz-Rosedale Bridge. Schedule III: Highway 1 and miscellaneous streets in Yale (see also Chillwack)		359,010.05	
S-1618—Trans-Canada Highway, Job A: Jones Creek-Hunter Creek (8.2 km). Job B: Hope-Spuzzum truck lanes (20.6 km). Job C: Highway 9, Trans-Canada Highway to Rosedale Bridge (2.5 km)		17,677.90	802,024.07

YALE-LILLOOET DISTRICT—*Continued*

	$	$	$
Design and Survey Branch			
Surveys Generally—Project L-0101—			
4 Mile Corner-Nicolum Creek, Highway 3		16,027.83	
Ashcroft, First Avenue from Thompson River Bridge to C.P.R. Crossing		14,473.85	
Fraser River Crossing at Lillooet		23,297.85	
Garibaldi from D'Arcy to Lillooet		689.96	
Hat Creek access		164.00	
Highway 1, South of Yale		37,635.13	
Highway 3, Rhododendron Flats		13,202.76	
Highway 5, Merritt-Kamloops		1,141.41	
Hope Princeton-Whipsaw Creek revision		5,934.43	
Hope-Merritt (Coquihalla)		483,159.67	
Kamloops, Highland Valley		132,920.61	
Lillooet, curb and gutter		551.00	
Merritt to Kamloops		17,900.00	
Minor road surveys		3,680.31	
North approach Hope Bridge		2,492.17	
Route 8, Merritt-Spences Bridge		39,567.55	
Southern Trans-Provincial Highway (truck lanes) from Hope to Princeton		16,703.80	
Southern Trans-Provincial Highway 3, 47-48 km		15,468.77	
Southern Trans-Provincial Highway 3, 95 km-101 km		10.50	
Texas Creek, Hope		11,001.51	
Trans-Canada Highway 1, Cache Creek-DL8 (Lillooet District Boundary)		5,562.26	
Trans-Canada Highway 1, Oregon Jack-north Ashcroft junction		1,486.00	
Trans-Canada Highway 1 from south boundary Sec. 7, Tp. 18, R. 24, K.D.Y.D. to north boundary DL 500		444.00	
Trans-Canada Highway and Cariboo Cache Creek junction		588.00	
Trans-Canada Highway, Flood-Haig (via Hope)		7,998.22	852,101.59
Legal Surveys Office			
Legal Surveys—Project L-0099—			
Drainage easement, Emory Creek Road 138 through Lot 5, Plan 4958, DL 12 in Sec. 27, Tp. 6, R. 26, W6M, Y.D.Y.D.		1,003.49	
Gunn Lake Road, S. bdy. L 7488 to N. bdy. L 8001 L.D.		5,923.96	
Lillooet, Cache Creek Highway 12B, DL 89 to S. bdy. DL 1001 L.D.		11,953.60	
Statutory right of way for Highway, Princeton-Kamloops, Highway 5 through south half DL 1763, part of DL 1765, K.D.Y.D.		1,785.86	
Statutory right of way for Highway, Princeton-Kamloops, Highway 5 through DL 713, K.D.Y.D.		1,579.60	
Trans-Canada Highway, Spences Bridge easterly through DL 28 and DL 1260		6,314.93	28,561.44

YALE-LILLOOET DISTRICT—*Continued*

	$	$	$
Property Services Branch			
Rights of Way and Property Purchases—Project P-0113—			
Aberdeen Mine Road		25,770.00	
Airport Road 205		1.00	
Albert Street extension		2.00	
Boston Bar—Aerial Ferry Parking Lot		25,000.00	
Coldwater Road 17		4,500.00	
Coldwater Road 7		500.00	
Coquihalla Highway		20,920.31	
Coquihalla Highway, Nicolum Creek to Peers Creek		387,108.05	
Emory Creek Road		1.00	
Forest Grove-Canim Lake		25,383.00	
Gordon Creek Flood Control		3,233.00	
Gravel pits		23,659.44	
Gunn Lake North West Road 90		14,958.45	
Gunn Lake Road		1,078.00	
Highway 3, Hope to Nicolum Creek		272,000.00	
Highway 5		1.00	
Lillooet-Cache Creek, Highway 12B		15,000.00	
Lillooet Bridge approach—Bralorne Road		18,152.64	
Nicolum Creek-Peers Creek		1.00	
Oregon Jack Indian Reserve 5 to Cache Creek		98,000.00	
Othello Road		12,500.00	
Road 40		3,833.20	
Southern Trans-Provincial Highway 3		35,000.00	
Southern Trans-Provincial Highway 3, Similkameen Falls		72,800.00	
Texas Creek Road 26-204		3,900.00	1,063,302.09
Total, Yale-Lillooet District			27,485,395.76

REPORT OF THE DIRECTOR OF AIR SERVICES

P. S. Perry

Under the Ministry's Air Tansport Program the Air Services Branch continued flights during the year to serve the air ambulance, transportation and survey and photography requirements of the various ministries.

These activities were carried out by a fleet of four Cessna Citations, two Beechcraft A-200, an Otter and a Beaver aircraft. All equipment is based at Victoria International Airport except the Beaver which is based at Kamloops.

The new policy of booking special flights for passengers other than Cabinet Ministers proved to be effective in reducing the number of flights operated thus providing aircraft and crews for more air ambulance flights. As a result there were 675 air ambulance flights in the fiscal year, April 1981 to March 1982, compared to 579 for the same period in the previous fiscal year—an increase of 16.58 per cent.

There were 6,530.8 aircraft flying hours logged with 1,556.4 of these devoted to air ambulance and 2,935.5 hours recorded for transportation flights. The total number of passengers flown was 14,868.

The scheduled flight service between Victoria/Vancouver/Victoria operated with an average load factor of 58.44 per cent and the peak passenger months were May and October while the low months were July and August 1981. This scheduled service retained the same number of flights as reported in the last fiscal report—viz: 10 flights Monday through Thursday and 12 flights on Fridays. An extra late evening flight is added as required when the Legislature is in session.

The Travel Recording Centre issued 39,006 travel warrants to Government employees and the charge-back for personnel air transportation on Government aircraft to the Ministries totalled $723,382; an increase of $258,382 over the 1980/81 fiscal year.

Summary of Statistics for the Fiscal Year April 81–March 82

Aircraft Flying Hours

Beaver Aircraft (1)	530.6
Otter (1)	538.9
Beechcraft (2)	1,367.6
Cessna Citation (4)	3,911.3
Simulator (1)	182.4

Air Ambulance Flights

Number of flights	675
Number of patients	829
Flight time	1,556.4
Mileage	343,985

Aerial Photography

Total hours flown	757.4
Miscellaneous flights (tests, surveys, ferrying, simulator)	1,281.5

Over-all Operating Statistics

Total aircraft flying hours	6,530.8
Total passenger hours	2,935.5
Total passengers carried	14,868

Breakdown of Passengers Carried

Scheduled flights	11,710
Non-scheduled flights	3,158

REPORT OF THE DIRECTOR OF PROPERTY SERVICES

A. C. Brown

Property acquisitions for the fiscal year 1981/82 were made initially in an extremely inflated market; then with a cautious attitude and finally a depressed real estate field. These changes necessitated continuous property valuation analysis and while the Branch experienced fewer acquisitions than the previous year it was involved in many large and complicated settlements.

The Branch settled 946 claims with a further 1,196 in process of negotiations.

The expenditures on acquisitions of highway rights of way and other properties required by the Ministry totalled $45,729,504.69.

A total of 712 gazettes establishing rights of ways was processed by publication of notice in *The British Columbia Gazette* and a total of 74 closures was made by similar procedure.

One claim was settled by arbitration.

The Branch's Indian research section is being called upon continually for historical road information by our various Districts as well as other ministries.

Surplus lands have been disposed as follows:

78 parcels transferred to Lands, Parks and Housing.
46 parcels transferred to Municipalities.
66 parcels of closed road transferred.

Gazettes

Region 1	Establishing	Closing
Burnaby-Willingdon	1	0
Coquitlam-Moody	6	1
Burnaby-Edmonds	6	0
Burnaby North	1	0
Central Fraser Valley	1	1
Chilliwack	5	0
Delta	2	0
Dewdney	13	1
Langley	7	1
New Westminster	1	1
North Vancouver-Seymour	0	0
North Vancouver-Capilano	0	0
Richmond	3	0
Surrey	6	1
Vancouver Centre	0	0
Vancouver East	1	0
Vancouver South	2	0
Vancouver-Point Grey	0	0
Vancouver-Little Mountain	0	0
West Vancouver-Howe Sound	6	5
Yale-Lillooet	0	0
Maillardville-Coquitlam	1	0
Mackenzie	7	2
Total	69	13

	Establishing	Closing
Region 2		
Boundary-Similkameen	27	4
Cariboo	28	6
Kamloops	15	0
Okanagan North	18	2
Shuswap-Revelstoke	27	3
Okanagan South	20	7
Yale-Lillooet	37	1
Mackenzie	0	0
Total	172	23
Region 3		
Boundary-Similkameen	5	0
Columbia River	30	4
Kootenay	15	0
Nelson-Creston	66	4
Rossland-Trail	28	2
Shuswap-Revelstoke	25	1
Okanagan North	5	0
Total	174	11
Region 4		
Cariboo	61	12
North Peace River	19	0
Omineca	6	1
Prince George North	6	1
Prince George South	21	0
South Peace River	19	1
Mackenzie	0	0
Prince Rupert	0	0
Total	132	15
Region 5		
Atlin	5	0
Prince Rupert	4	0
Skeena	10	1
Omineca	43	0
Total	83	1
Region 6		
Alberni	4	0
Comox	23	0
Cowichan-Malahat	8	1
Nanaimo	22	2
Saanich and the Islands	7	1
Victoria	0	0
North Island	13	3
Esquimalt-Port Renfrew	4	4
Dewdney	1	0
Total	82	11
Total for All Regions	712	74

Transfers to Lands, Parks and Housing (Parcels)

Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Total
25	25	8	6	0	14	78

Transfers to Municipalities (Parcels)

West Vancouver	22
Richmond	1
Matsqui	6
Mission	1
Port Hardy	16
Total	46

Transfers of Closed Road Allowances (by O.I.C)

Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Total
13	21	9	11	4	8	66

REPORT OF THE MANAGER OF BUILDING SERVICES

D. Grey

The fourth year of the Ministry's building plan was again severely curtailed, because of restraints, but saw some advancement in minor improvements and elimination of a number of problem spots.

Responsibility for the design, tendering, construction, maintenance and ownership of weigh scale stations was returned to the Ministry.

Construction was commenced or completed on the following major projects:

Completion phase of the water and sprinkler system	George Massey Tunnel
Paving laboratory	Burnaby
Rest area building	Bradner Road Cole Road
Major extension to garage	Revelstoke
New district yard and shop	Prince Rupert
New yard and shop	Hagensborg
New combined paving and geotechnical laboratory	Terrace
New district garage	Hope
New motor vehicle office	Surrey
New weigh scale station	Parksville
New district office	Prince Rupert
New district office	Penticton
New district office	Vernon

Functional programs were prepared, planning carried out, and projects designed and made ready to tender for the following:

New regional garage	Prince George
New regional combined paving and geotechnical laboratory	Region No. 1—Burnaby
Weigh scale station	Vernon
New district garage	Abbotsford
Storage, assembly and bridge building	Lillooet
New yard and buildings	Yahk
New bunkhouse	Kootenay Pass Camp
New bunkhouse	Mt. Lemoray
New district office	Dease Lake
Major alterations, District yard	Cranbrook

We are now embarking on a program of systematic replanning of yards and buildings throughout the Province, with a careful look at future needs, including the replacement of temporary facilities with permanent ones.

REPORT OF THE SENIOR INFORMATION OFFICER

R. J. Baines

The Public Information Services Branch consists of a Senior Information Officer, two Public Information Officers and one full-time and two part-time stenographers. A third Public Information Officer, attached to Region 1 at Burnaby, reports to the Senior Information Officer in Victoria in connection with the Ministry's house magazine *Road Runner & Carrier*.

In the 1981/82 fiscal year, the Branch helped provide and produce 15,000 copies of a special pamphlet on the Annacis Crossing project and another on the Air Services Branch and assisted in the writing and editing of an 82-page booklet on the Ministry's ferry system researched and written by Frank Clapp.

Four 32-page issues of the *Road Runner & Carrier*, the Ministry's house magazine were edited, and produced, each with a run of 8,500 copies. The Branch handled about 600 letters during the fiscal year and drafted 406 replies, mostly for the Minister's signature and those of other senior officials. The remainder were dealt with by phone or by reference to other branches or District highway officials.

During the fiscal year the Branch wrote and arranged the distribution of 312 press releases. Some of these are sent to particular regions and others go out on the Government core list to all media in the Province as well as the Legislative press gallery if they are of general interest. A number of feature stories about Ministry activities were also written and distributed to community newspapers.

The Senior Information Officer took over and helped produce the 1980/81 Annual Report and started work on the 1981/82 edition. The latter is expected to be a run of about 500 pages, about the same length as the previous edition and some changes will be incorporated in the layout and the typography. Some 200 copies of the 97-page Minister's "Highway Branch Reports and Statistical Data 1981/82" were edited and produced for the Legislature.

The Branch also arranged and organized eight radio safety campaigns for holiday weekends, 14 radio and newspaper advertising campaigns on winter driving, road and bridge closures, bridge openings, the Mount Terry Fox dedication ceremony near Tete Jaune Cache and a number of other local advertisements usually dealing with changes in ferry schedule or other concerns to local motorists. Most of this work is done through an ad agency in Vancouver but copy is often written and usually edited by the Senior Information Officer.

The Victoria office handled an average of 50 phone calls a week from the public and the press and from other ministries. Considered the main media contact for the Ministry, the Branch receives phone calls from many weekly and daily newspapers and radio stations in small communities in various parts of British Columbia.

Along with its other duties the Branch assisted the Ministry of Tourism in the production of the Provincial Government road map by obtaining information from all the Highway Districts in the Province and forwarding suggested changes to the Ministry of Tourism for incorporation into the new map. This is an annual function which helps to keep the map up to date and improve its accuracy.

REPORT OF THE CONTRACT DOCUMENTS OFFICER

R. A. Fisher

The 1981/82 fiscal year has again been a relatively low production year for contracts. Only 112 formal contracts were advertised, coincidentally the same number as the previous year. Of these, 17 were ferry terminal contracts for the British Columbia Ferry Corporation; nine were grading contracts; nine were paving contracts; 27 were for bridges and 50 miscellaneous involving gravel crushing, landscaping, weigh scale, MC-250 asphalt coldmix for pavement patching, improvements to the George Massey Tunnel and a ferry for the Comox-Powell River service operated by the Ministry.

Of the nine grading contracts, five were for the completion of the Northeast Coal Development access road from Chetwynd to Tumbler Ridge. The remainder included the Summit Drive extension at Kamloops; the reconstruction of the Westbank to Kelowna section (4.10 miles) of Highway 97; construction of the Byrne Road to Queensborough Bridge (2.69 km) section of Marine Drive in Burnaby and New Westminster and the supply of dredged material from the Fraser River for the proposed Annacis Island crossing.

The nine paving contracts totalled 249.72 km in various parts of the Province but included 5.67 km of curb and gutter construction in Agassiz, paving on Highway 9, paving on the Trans-Canada Highway and Yale streets.

Bridge contracts were widely spread across the Province, as were 25 gravel crushing contracts for maintenance purposes.

Productivity in the quick print shop has again increased over last year, especially the Diazo White Plan Printer which showed a 200 per cent increase. This antiquated piece of equipment was becoming a health hazard to the operator as ammonia fumes were being emitted quite heavily due to the increased production. Therefore, it was replaced with a new more efficient model capable of a much higher production, and the ammonia fumes were reduced to a minimum.

The library facilities are becoming more and more popular, to the point where certain parties who were reluctant to have books included in the library are now turning these in, as the service is proving to be very efficient.

Word processing is also proving to be most efficient for productivity of the Branch, in contract documentation, as well as for other documents relating to the function of the Ministry. Expansion through additional equipment is being curtailed for the present in order to develop more advanced programs and improve the efficiency of the current equipment.

Though the tempo of contract production has slowed to a moderate pace, the introduction of word processing has increased the productivity of the Branch to the benefit of the Ministry.

In the fourth quarter of the year, there has been a very noticeable increase in the number of tenders being submitted for Highways contracts, and the bidding has been very close, indicating keen competition. However, Statistics Canada reports still show the Province of British Columbia to have one of the highest increases in pricing for such items as earth excavation and gravelling in highway construction.

Contract Statistics are as follows:

CONTRACT STATISTICS

SUMMARY OF ELECTORAL DISTRICTS OF GRADING, PAVING, BRIDGE, FERRY-LANDING, FERRY, CRUSHED GRAVEL, AND MISCELLANEOUS CONTRACT PROJECTS COMPLETED OR IN PROGRESS

Electoral District		Project
Alberni	Paving:	
	S-0647	Asphalt Surfacing, Sutton Pass to Junction, Ucluelet on Tofino Highway 4 and Miscellaneous Roads (35.2 km)
Atlin	Bridge:	
	B-1102-1	Substructures, Greenville Bridge No. 2735, Greenville Access Road.
	Gravel Crushing:	
	M-0743-7	Bell Irving No. 1, Area 2, Pit 5109, Prince Rupert District.
	M-0743-17	Aeroplane Lake Pit No. P5350, Dease Lake District.
	M-0743-18	Great Lake Summit Pit No. P5302C, Dease Lake District.
	M-0743-23	Devil Creek Pit No. 5308, Dease Lake District.
Burnaby-Edmonds	Grading:	
	C-1121	Construction of Byrne Road to Queensborough Bridge on Marine Way (2.69 km) (*see also* New Westminster).
	Miscellaneous:	
	J 1403B	Landscape Maintenance Highway Plantation Beds First Avenue Interchange to McCallum Road Interchange, Trans-Canada Highway 1.
Burnaby-Willingdon	Miscellaneous:	
	J 1403B	Landscape Maintenance Highway Plantation Beds First Avenue Interchange to McCallum Road Interchange, Trans-Canada Highway 1.
Cariboo	Paving:	
	S-1050	Miscellaneous Roads, Williams Lake Highway District, Dog Creek Area and Highway 20 (29.1 km).
	Bridges:	
	B-1115-1	General Construction—Baker Creek Bridge No. 1190, Improvements, on Marsh Drive, Quesnel.
	Gravel Crushing:	
	M-0743-6	Colpit Lake Pit No. 4782, Williams Lake.
	M-0743-22	Boyd Pit No. 2755, 100 Mile House.
Central Fraser Valley	Miscellaneous:	
	D-3716-3	Landscape Development of Cole Road Rest Area, Chilliwack District.
Chilliwack	Paving:	
	S-0652	Chilliwack Curb and Gutter, Highway 9, Highway 1—Surfacing.

CONTRACT STATISTICS—*Continued*

Electoral District	Project	
Comox	Bridges:	
	B-1057-1	Marine Structures at Quathiaski Cove Ferry Terminal.
	B-1373-2	General Modifications to Bonell Creek Bridge No. 1246, Nanoose Creek Bridge No. 1247, Island Highway 19.
	B-1391-1	Dredging Campbell River Ferry Terminal.
	H-1125	Conversion of M.V. *Princess of Vancouver* to Roll-on, Roll-off Ferry.
	Miscellaneous:	
	C-2901-2	Construction of Weigh Scale Station at Parksville, Island Highway 19.
	M-0979-0001	Supply and deliver MC250 Asphalt Patchmix to Quadra and Hornby Islands off east coast of Vancouver Island.
Coquitlam-Moody	Miscellaneous:	
	J-1404B	Landscape Maintenance Cape Horn Interchange to Port Mann Bridge, Trans-Canada Highway.
Cowichan-Malahat	Paving:	
	S-0744	Asphalt Surfacing, Junction Trans-Canada Highway to Meade Creek Bridge on Highway 18 (30.9 km).
	Bridges:	
	B-0751	General Construction—Meade Creek Bridge No. 1382 on Youbou Road.
	Gravel Crushing:	
	M-0743-16	Supply and deliver, Gabriola and Thetis Island.
Delta	Grading:	
	C-1150	To supply dredged materials from Fraser River into stockpile at Fraser River Crossing, Highway 99 to Queensborough Bridge.
	Ferries:	
	M-216-1	Renovation of Hull Maintenance Building, Tsawwassen Ferry Terminal.
	T.F.M. 192-2	Walkway and Preboarding Building connecting Berths 3 and 4, Tsawwassen Ferry Terminal.
	T.F.M. 192-3	Construction of Transfer Deck from Berths 3 and 4 on Tsawwassen Ferry Terminal.
	T.F.M. 210-1	Double Decking Berth No. 4, Tsawwassen Ferry Terminal.
	Miscellaneous:	
	C-3325	Renewal of cold water supply piping for fire sprinkler system, George Massey Tunnel, Highway 99.
Kamloops	Grading:	
	C-0790-1	Summit Drive Extension, Stage 1, Kamloops.
	Bridges:	
	B-0734-1	General Construction, Clearwater Town Bridge No. 7791, Old North Thompson Highway.

CONTRACT STATISTICS—*Continued*

Electoral District	Project	
Kootenay	Bridges:	
	B-1048-1	General, removal of spans, piers and abutments of Wardner Bridge No. 672 on Old Southern Trans-Provincial Highway 3.
	B-1082-1	General Construction, Wilson Bridge No. 799 on Elk Valley Road.
	B-1088-1	Sidewalk addition to North Fernie Bridge No. 299, Southern Trans-Provincial Highway.
	Gravel Crushing:	
	M-0743-1	In Stockpile Thunderbird Pit No. 3527A, Cranbrook.
Langley	Miscellaneous:	
	J-1404B	Landscape Maintenance, Cape Horn Interchange to Port Mann Bridge, Trans-Canada Highway 1.
Mackenzie	Ferries:	
	B-1389-3	Fill Area and Pave Blubber Bay Ferry Terminal.
	H-1125	Conversion of MV *Princess of Vancouver* to Roll-on, Roll-off Vehicle Ferry.
	T.F.M. 177	New Ferry Building, Langdale Ferry Terminal.
	T.F.M. 218	Complete Installation of Emergency Power Generator of Langdale and Saltery Bay Ferry Terminals.
Nanaimo	Ferries:	
	T.F.M. 143-3	Electrical Systems, Departure Bay Ferry Terminal.
	T.F.M. 143-4	Upper Ramp Approaches, Berth No. 3, Departure Bay Ferry Terminal.
	T.F.M. 143-5	Passenger Facilities Building, Departure Bay Ferry Terminal.
	T.F.M. 211	Stores Building Extension, Departure Bay Ferry Terminal.
	Gravel Crushing:	
	M-0743-16	Supply and deliver, Gabriola and Thetis Islands.
	Miscellaneous:	
	H-0678	Construction of Passenger 70-Automobile Ferry.
Nelson-Creston	Gravel Crushing:	
	M-0743-2	Government (Playmore) Pit No. 3102, Nelson.
New Westminster	Grading:	
	C-1121	Construction of Byrne Road to Queensborough Bridge on Marine Way (2.69 km).
	C-1150	To supply dredged material from Fraser River into stockpile at Fraser River Crossing, Highway 99 to Queensborough Bridge.
	Miscellaneous:	
	J-1403B	Landscape Maintenance, Highway Plantation Beds, First Avenue Interchange to McCallum Road Interchange, Trans-Canada Highway 1.

CONTRACT STATISTICS—*Continued*

Electoral District	Project	
North Island	Miscellaneous:	
	M-0979-001	Supply and deliver MC250 Asphalt Patching to stockpile on Quadra and Hornby Islands off east coast of Vancouver Island.
North Peace River	Paving:	
	S-0649	Miscellaneous Roads in Fort St. John Area (46.7 km) recalled under S-1049.
	S-1049	Miscellaneous Roads in Fort St. John Area. (46.7 km).
	S-1120	Crushed Granular Aggregate in stockpile, Rose Prairie Area, Fort St. John Highway District.
	Gravel Crushing:	
	M-0743-13	Fort Nelson Main Pit 4411A.
North Vancouver-Seymour	Miscellaneous	
	J-1103B	Landscape Maintenance, Horseshoe Bay to Lynn Valley Interchange (1.7 km), Trans-Canada Highway 1.
Okanagan-North	Miscellaneous:	
	C-3422-2	Landscape Development, Vernon to Swan Lake on Highway 97.
	M-0979-0006	Supply and deliver MC250.
Okanagan-South	Grading:	
	1066-0002	Reconstruction, Westbank to Kelowna Section III, Okanagan Highway 97 (4.3 mile).
	Bridges:	
	B-1054-1	Sidewalk addition to Mission Creek Bridge No. 1324 on K.L.O Road.
	Gravel Crushing:	
	M-0743-25	Pyman Pit No. 2928, Kelowna.
Omineca	Paving:	
	S-0763	Asphalt Surfacing, Village of Vanderhoof and Miscellaneous Roads in Vanderhoof Area (47.7 km).
	Bridges:	
	B-0708-1	General Construction, Vanderhoof West Bridge No. 2708 and Vanderhoof West Overhead No. 2709 on Highway 97.
	Gravel Crushing:	
	M-0743-9	In Stockpile, Donaldson Pit No. P54018, Smithers.
	M-0743-14	In Stockpile, Rose Lake South Pit No. 5590, Burns Lake.
	M-0743-15	In Stockpile, Moose Crossing Pit No. 5516, Burns Lake.
	M-0743-20	In Stockpile, Strimbold Pit No. 5579, Burns Lake.
	M-0743-21	In Stockpile, Six Mile Pit No. 5530, Burns Lake.
Prince George-North	Bridges:	
	B-0937	Cleaning and Painting Parsnip River Bridge No. 1185, John Hart Highway 97.

CONTRACT STATISTICS—*Continued*

Electoral District		Project
Prince George-South	Paving:	
	B-0697-1	General Construction, C.N.R. Overhead No. 2437, Prince Rupert-Ridley Island Highway.
	B-1035	Cleaning and Painting McClymont Bridge No. 1431, Prince Rupert Arterial 478R.
Prince Rupert	Ferries:	
	T.F.M. 198-6	Deas Refit/Stores Complex, Site Utilities.
	T.F.M. 198-7	Deas Refit/Stores Complex Machine Shop Renovations.
	T.F.M. 198-8	Deas Refit/Stores Complex, Construction of New Welding Shop.
	T.F.M. 198-9	Deas Refit/Stores Complex, General Contract for Refit Shop Renovations.
	Miscellaneous:	
	C-3325	Removal of Cold Water Supply Piping for Fire Sprinkler System in George Massey Tunnel on Highway 99.
Richmond	Ferries:	
	T.F.M. 198-6	Deas Refit/Stores Complex, Site Utilities.
	T.F.M. 198-7	Deas Refit/Stores Complex, Machine Shop Renovations.
	T.F.M. 198-8	Deas Refit/Stores Complex, Construction of New Welding Shop.
	T.F.M. 198-9	Deas Refit/Stores Complex, General Contract for Refit Shop Renovations.
	Miscellaneous:	
	C-3325	Renewal of Cold Water Supply Piping for Fire Sprinkler System in George Massey Tunnel on Highway 99.
Saanich and The Islands	Ferries:	
	T.F.M. 188-1	Vesuvius Ferry Terminal, Expansion to Holding Compound.
	T.F.M. 214-1	Swartz Bay Ferry Terminal, Double Decking for Berth No. 2.
	Miscellaneous:	
	D-0095-1	Landscape Development of John Road Highways Yard.
	J-6002	Landscape Maintenance, Blanshard Street, Tolmie Avenue to Saanich Road, Victoria (0.9 km).
	J-6027	Supply, deliver and place AC-5 Asphalt Surfacing to Salt Spring Island off coast of Vancouver Island.
Shuswap-Revelstoke	Paving:	
	S-1009	Asphalt Surfacing, Martha Creek to Carnes Creek, Revelstoke-Mica Highway 23 (24.5 km).
	S-1063	Asphalt Surfacing Mars Creek to Downie Creek Section, Revelstoke-Mica Highway 23 (31.75 km).
	Bridges:	
	B-0796-3	Deck LaForme Creek Bridge No. 2697 and Carnes Creek Bridge No. 1534, Revelstoke-Mica Highway 23.
	B-1079	Downie Creek Bridge No. 857 and Mars Creek Bridge No. 1430 and removal of Carnes Creek Bridge No. 1534, Revelstoke-Mica Highway 23.
	B-1234-1	Substructure, Mars Creek Bridge No. 1430, Invitation Bid to complete previous Contract, Revelstoke-Mica Highway 23.

CONTRACT STATISTICS—*Continued*

Electoral District	Project	
Skeena	Bridges:	
	B-0808	Cleaning and Painting Terrace Bridge No. 473, Yellowhead Highway 16.
	B-1383-1	General Construction of Slickenside Creek Bridge No. 6714, Polymar Creek Bridge No. 2235 and Snowbound Creek Bridge No. 2236, Yellowhead Highway 16.
	Gravel Crushing:	
	M-0743-3	In Stockpile Carnaby Pit No. P5411D, Smithers.
	M-0743-4	In Stockpile Jack Pine Pit No. 5253, Terrace.
	M-0743-5	In Stockpile Pit No. 5211 on District Lot 5835, Terrace.
	M-0743-10	In Stockpile Robinson Lake Trail Pit No. 5238, Terrace.
South Peace River	Grading:	
	C-0745	Construction—Martin Creek to Upper Martin Creek (13.93 km), Northeast Coal Development Access Road.
	C-0746	Construction—Upper Martin Creek to Gwillim Lake (13.403 km), Northeast Coal Development Access Road.
	C-0748	Construction, Bullmoose to Tumbler Ridge West (19.47 km) Northeast Coal Development.
	C-0749	Construction, Bullmoose to Tumbler Ridge East (19.63 km) Northeast Coal Development.
	Bridges:	
	B-0725	General Construction, Dickebusch Creek Bridge No. 2675, Northeast Coal Development.
	B-1393-2	General Construction, Twidwell Bend Bridge No. 2268, Northeast Coal Development.
	Gravel Crushing:	
	M-0743-8	In stockpile, Flatbed No. 1, Pit No. 4302L, Dawson Creek.
Vancouver Point Grey	Miscellaneous:	
	C-3912-2	Landscape Development, 16th Avenue and SW. Marine Drive, University Endowment Lands, Vancouver.
	C-3912-3	Landscape Development, 16th Avenue Blanca Street to Sta. 12 + 90, University Endowment Lands, Vancouver.
Vancouver South	Miscellaneous:	
	J-1401B	Landscape Maintenance, Knight Street Bridge Interchange, Vancouver.
	J-1402B	Landscape Maintenance, Highway 99 at Westminster Highway, Cambie Road, and north and south end Oak Street Bridge vicinity, Vancouver.
West Vancouver-Howe Sound	Paving:	
	S-0648	Asphalt Surfacing, Whistler and Pemberton Area Roads (35.55 km).
	Bridges:	
	B-1147-1	General Construction, "M" Creek Bridge No. 1453, Garibaldi Highway 99.
	Miscellaneous:	
	J-1103B	Landscape Maintenance Horseshoe Bay to Lynn Valley Interchange (17 km), Trans-Canada Highway 1.

CONTRACT STATISTICS—*Continued*

Electoral District	Project	
Yale-Lillooet	Bridges:	
	B-0609-1	General Construction, Eleven Mile Creek Bridge No. 1209 and Nicolum Creek Bridge No. 1208, 4-laning, Southern Trans-Provincial Highway 3.
	Gravel Crushing:	
	M-0743-11	In Stockpile, Logan Lake East Pit No. 2553, Merritt.
	M-0743-12	In Stockpile, Anderson Pit. No. 2610, Lillooet.
	M-0743-19	In Stockpile, Cooper Pit No. 2628, Lillooet.
	M-0743-24	In Stockpile, Wright Pit No. 2636, Penticton.
	Miscellaneous:	
	M-0979-0002	Supply and Deliver MC250 Asphalt Plantmix to Stockpile Godey Pit No. 2542 , Spius Pit No. 2545 and Logan Place East Pit No. 2553, in Merritt District.
	M-0979-0003	Supply and Deliver MC250 Asphalt Coldmix to Stockpile, 5 Mile Pit No. 2627, Lillooet District.
	M-0979-0004	Supply and Deliver MC250 Asphalt Coldmix in Stockpile at Wright Pit No. P2436 and Peterson Pit No. 2514 in Penticton Area, Merritt District.
	M-0979-0005	Supply and Deliver MC250 Asphalt Coldmix in Stockpile at Copper Valley Pit No. 2628 and Oregon Jack Pit No. 2609, Lillooet Highway District.
	M-0979-0010	Supply and Deliver MC250 Asphalt Coldmix in Stockpile at Happy's Gulch on Trans-Canada Highway 1, Merritt Highway District.
	M-1156-0001	Seton Portage Hydro Pit No. 2631 Lillooet.

TENDERS RECEIVED AND CONTRACTS AWARDED

Roads

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project C-0745—Construction Martin Creek to Upper Martin Creek, North East Coal Development Access Road (13.94 km)		
Miller Contracting Ltd.	6,295,326.00	Awarded
Geddes Contracting Co. Ltd.	6,564,045.00	
Edco Construction Co.	6,908,660.50	
Dawson Construction Ltd.	7,228,222.00	
R. K. Bryan Engineering Ltd.	7,469,442.00	
Norm-Ron Construction Co. Ltd.	7,882,528.00	
Goodbrand Construction Ltd.	8,132,224.00	
Emil Anderson Construction Co. Ltd.	8,813,169.00	
Tonto Construction Ltd.	12,347,463.00	
Project C-0746—Construction Upper Martin Creek to Gwillim Lake, North East Coal Development Access Road Sta. 9 + 37.488 to Sta. 148 + 80 (13.9 km)		
Attachie Construction Ltd.	3,783,315.79	Awarded
Edco Construction Co.	3,787,268.50	
Geddes Contracting Co. Ltd.	3,833,825.00	
General Enterprises	4,010,385.00	
Miller Contracting Ltd.	4,170,589.00	
Goodbrand Construction Ltd.	4,278,799.00	
Dawson Construction Ltd.	4,624,393.00	
Emil Anderson Construction Co. Ltd.	5,351,168.00	
Project C-0748—Construction—Bullmoose to Tumbler Ridge West, North East Coal Development Access Road, Sta. 151 + 00 to Sta. 345 + 70 (19.47 km)		
View Construction Ltd.	11,676,277.95	Awarded
Goodbrand Construction Ltd.	13,345,607.25	
Emil Anderson Construction Co. Ltd.	14,349,939.13	
Dawson Construction Ltd.	14,350,075.61	
Peter Kiewit Sons Co. Ltd.	15,576,737.30	
Loram Construction Ltd.	15,778,237.35	
Miller Contracting Ltd.	16,547,248.52	
Project C-0749—Construction Bullmoose to Tumbler Ridge East, North East Coal Development Access Road, Sta. 345 + 70 to Sta. 442 + 00 (9.63 km)		
Dawson Construction Ltd.	10,747,464.14	Awarded
Miller Contracting Ltd.	11,519,723.05	
View Construction Ltd.	12,560,332.40	
Peter Kiewit Sons Co. Ltd.	12,921,047.90	
Goodbrand Construction Ltd.	13,496,132.50	
Antler Construction Co. Ltd.	14,329,192.75	
Emil Anderson Construction Co. Ltd.	14,633,085.30	
Geddes Contracting Co. Ltd.	14,655,749.74	
General Enterprises	14,800,155.96	

TENDERS RECEIVED AND CONTRACTS AWARDED

Roads—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project C-0790—Summit Drive Extension, Stage 1, Kamloops (2.6 miles)		
View Construction Ltd.	2,867,944.35	Awarded
Nu-Road Contracting Ltd. and Wills Enterprises	2,886,053.00	
Dawson Construction Ltd.	2,986,695.20	
Goodbrand Construction Ltd.	3,292,599.10	
Miller Contracting Ltd.	3,514,134.00	
B-K Contractors Ltd.	3,750,408.00	
Emil Anderson Construction Co. Ltd.	3,771,667.60	
Peter Kiewit Sons Co. Ltd.	3,772,424.00	
Geddes Contracting Co. Ltd. and Procan Contractors Ltd.	3,807,766.50	
Project C-1066-0002—Reconstruction, Westbank to Kelowna, Section III, Okanagan Highway 97, Mile 44.43 to Mile 46.72 (4.1 miles)		
Cantex Engineering and Construction Co. Ltd.	2,419,711.14	Awarded
Tercon Contractors Ltd.	2,632,552.00	
Midvalley Construction Ltd.	2,749,695.00	
Miller Contracting Ltd.	3,139,799.00	
Goodbrand Construction Ltd.	3,223,851.50	
Edco Construction Co.	3,151,959.00	
Geddes Contracting Co. Ltd.	3,479,273.00	
Dawson Construction Ltd.	3,372,593.50	
Columbia Bitulithic Ltd.	4,562,957.60	
Project C-1121—Construction Byrne Road to Queensborough Bridge on Marine Way (2.69 km)		
United Contractors Ltd.	1,916,914.00	Awarded
Globe Excavations Ltd.	1,929,594.00	
Southwest Contracting Ltd.	2,127,040.00	
Standard General Construction (B.C.) Ltd.	2,331,493.00	
Goodbrand Construction Ltd.	2,365,601.00	
Miller Contracting Ltd.	2,644,705.00	
Progressive Contracting (Langley) Ltd.	2,729,225.26	
H.B Contracting Ltd.	3,013,939.68	
Project C-1150—Fraser River Crossing, Highway 99, Queensborough Bridge, Supply of Dredged Material		
Sceptre Dredging Ltd.	1,884,078.00	Not Awarded

Paving

Project S-0647—Asphalt Surfacing 1981/82: Sutton Pass to Junction, Ucluelet on Tofino Highway 4 and Miscellaneous Roads (35.2 km)		
R. and E. Paving (1975) Ltd.	1,267,295.00	Awarded
Victoria Paving Co. Ltd.	1,540,731.79	
Project S-0648—Asphalt Surfacing 1980/81, Whistler and Pemberton Area Roads (35.55 km)		
B.A. Blacktop	1,290,588.25	Awarded
Columbia Bitulithic Ltd.	1,427,443.00	
LeDuc Paving Ltd.	1,428,989.25	
Central Paving and Engineering Ltd.	1,525,600.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Paving—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project S-0649—Asphalt Surfacing 1980/81: Miscellaneous Roads in Fort St. John area (46.7 km)		Recalled under 1049
Project S-0652—Surfacing and Curb and Gutter, Schedule 1—Agassiz Curb and Gutter (0.542) km), Schedule 2—Highway 9 (1.1 km), Schedule 3—Highway 1 Yale Streets (4.03 km)		
Columbia Bitulithic Ltd.	458,236.59	Awarded
Imperial Paving Ltd.	479,841.00	
Winvan Paving Ltd.	697,097.15	
Project S-0744—Asphalt Surfacing 1980/81: Highway 18 Junction Trans Canada Highway to Meade Creek Bridge (30.9 km)		
Island Asphalt Producers Ltd.	495,336.00	Awarded
Hub City Paving Ltd.	525,200.00	
LeDuc Paving Ltd.	532,800.00	
Project S-0763—Asphalt Surfacing 1980/81: Village of Vanderhoof and Miscellaneous Roads, Vanderhoof Area (47.7 km)		
H. Williamson Blacktop & Landscaping Ltd.	1,575,455.00	Awarded
LeDuc Paving Ltd.	1,641,400.00	
Columbia Bitulithic Ltd.	1,836,300.00	
Central Paving & Engineering Ltd.	1,920,805.00	
Project S-1009—Asphalt Surfacing 1980/81, Martha Creek to Carnes Creek, Revelstoke-Mica Highway 23 (24.5 km)		
Columbia Bitulithic Ltd.	867,550.00	Awarded
Columbia Blacktop Ltd.	986,358.00	
LeDuc Paving Ltd.	1,125,350.25	
Project S-1049—Asphalt Surfacing 1981/82: Miscellaneous Roads, Fort St. John Area (46.7 km)		
LeDuc Paving Ltd.	1,766,035.00	Awarded
Columbia Bitulithic Ltd.	1,831,028.00	
Aero Asphalt Paving Ltd.	2,093,040.00	
Goodbrand Construction Ltd.	2,158,708.00	
Project S-1050—Williams Lake District, Dog Creek Area Roads and Highway 20 (29.1 km)		
Central Paving & Engineering Ltd.	467,276.00	Awarded
Williamson Blacktop and Landscaping Ltd.	473,863.00	
LeDuc Paving Ltd.	482,266.00	
Columbia Bitulithic Ltd.	532,515.00	
Project S-1063—Asphalt Surfacing 1981/82: Mars Creek to Downie Creek Section, Revelstoke-Mica Highway 23, (31.75 km)		
Columbia Bitulithic Ltd.	1,337,008.25	Awarded
Midvalley Construction Ltd.	1,442,622.00	
Siva Transport (1976) Ltd.	1,511,747.00	
LeDuc Paving Ltd.	1,616,553.00	
Winvan Paving Ltd.	1,944,478.58	

TENDERS RECEIVED AND CONTRACTS AWARDED

Paving—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project S-1120—Asphalt Surfacing 1981/82: Crushed Granular Aggregate in Stockpile, Rose Prairie Area, Fort St. John Highway District		
Johnson's Trucking Western Ltd.	243,000.00	Awarded
Cantex Engineering and Construction Co. Ltd.	259,200.00	
L.R. Wyles Trucking Ltd.	286,100.00	
Enderby Gravel Products Ltd.	372,000.00	
M.R.C. Gravel Products Ltd.	375,950.00	
Goodbrand Construction Ltd.	399,800.00	

Bridges

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project B-0609—Eleven Mile Creek Bridge 4-laning No. 1209; Nicolum Creek Bridge 4-laning No. 1208, Southern Trans-Provincial Highway, Contract No. 1—General		
G.W. Carlson Construction Ltd.	559,915.00	Awarded
Kingston Construction Ltd.	666,568.85	
Commonwealth Construction Co. Ltd.	760,716.00	
Dura Construction Ltd.	895,410.00	
Project B-0697—C.N.R. Overhead No. 2437, Prince Rupert-Ridley Island Highway, Contract No. 1—General		
Ansha Contracting Co. Ltd.	373,102.00	Awarded
Sygnet Construction Co. Ltd.	394,222.00	
Project B-0708—Vanderhoof West Bridge No. 2708, Vanderhoof West Overhead No. 2709, Highway 27 Contract No. 1—General		
Hansa Construction Ltd.	3,259,460.00	Awarded
Wesco Contracting Ltd.	3,638,547.30	
Goodbrand Construction Ltd.	3,767,548.00	
Dillingham Corporation Canada Ltd.	4,202,435.00	
Dura Construction Ltd.	4,619,813.00	
Peter Kiewit Sons Co. Ltd.	4,631,356.00	
Project B-0725—Dickebusch Creek Bridge No. 2675, Northeast Development Road, Contract No. 1—General		
Kingston Construction Ltd.	551,509.00	Awarded
Goodbrand Construction Ltd.	632,110.00	
Project B-0734—Clearwater Town Bridge No. 7791, Old North Thompson Highway, Contract No. 1—General		
Goodbrand Construction Ltd.	2,580,380.00	Awarded
Peter Kiewit Sons Co. Ltd.	2,988,958.00	
Project B-0751—Meade Creek Bridge No. 1382, Youbou Road, Contract No. 1—General		
Kingston Construction Ltd.	144,713.00	Awarded
Westshore Contractors Ltd.	159,268.59	
G.W. Carlson Construction Ltd.	193,535.00	
Dura Construction Ltd.	291,589.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Bridges—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project B-0796—La Forme Creek Bridge No. 2697, Carnes Creek Bridge No. 1534, Highway 23, Revelstoke-Mica, Contract No. 3—Deck		
Kingston Construction Ltd.	1,958,000.00	Awarded
Goodbrand Construction Ltd.	1,983,000.00	
G.W. Carlson Construction Ltd.	2,230,000.00	
Dura Construction Ltd.	2,250,000.00	
Project B-0808—Cleaning and Painting Terrace Bridge No. 473		
Signet Construction Co. Ltd.	172,000.00	Awarded by Region
Project B-0937—Parsnip River Bridge No. 1185, Cleaning and Painting		
E. Railt Painters Ltd.	91,790.00	Awarded
Acme Commercial Painting (Vict.) Ltd.	174,686.00	
John J. Wulf Corrosion Coatings Ltd.	244,737.00	
Project B-1035—Cleaning and Painting McClymont Bridge No. 1431 on Prince Rupert Arterial 478R within City of Prince Rupert		Recalled
Project B-1048—Wardner Bridge No. 672, Closed Section of Southern Trans-Provincial Highway, Contract No. 1—General		
Hitec Steel Construction Ltd.	139,400.00	Awarded
Dominion Bridge, Vancouver	160,000.00	
Arnow Demolition Inc.	184,000.00	
Brittain Steel Ltd.	382,694.00	
Project B-1054—Mission Creek Bridge No. 1324, K.L.D. Road Contract No. 1—General, Sidewalk addition		
Amrak Enterprises Ltd.	58,266.50	Awarded
Hitec Steel Construction and Engineering Services Ltd.	65,036.80	
Interior Contracting Co. Ltd.	77,135.80	
Project B-1057—Quathiaski Cove Ferry Terminal, Contract No. 1, Marine Structures		
Quadra Construction Co. Ltd.	1,397,562.50	Cancelled
Dillingham Corp. Canada Ltd.	1,711,987.50	
Fraser Pile Driving Co. Ltd.	1,751,949.00	
Project B-1079—Downie Creek Bridge No. 857, Mars Creek Bridge No. 1430, and Removal of Carnes Creek Bridge No. 1534, Revelstoke-Mica Highway 23		
Interior Contracting Co. Ltd.	2,992,777.00	Awarded
Kingston Construction Ltd.	3,074,893.10	
Braniff Construction Ltd.	3,149,085.00	
Kenyon Construction Ltd.	3,218,595.00	
Tonto Construction Ltd.	3,694,446.00	
Goodbrand Construction Ltd.	3,773,760.00	
Hansa Construction Ltd.	4,554,072.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Bridges—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project B-1082—Wilson Bridge No. 799, Elk Valley Road, Contract No. 1—General		
Interior Contracting Co. Ltd.	437,470.00	Awarded
Kenyon Construction Ltd.	455,564.40	
Bastion Construction (1981) Ltd.	482,457.23	
Kingston Construction Ltd.	549,266.30	
Jaemar Construction Co. Ltd.	557,032.00	
Dura Construction Ltd.	598,684.00	
Braniff Construction Ltd.	602,112.20	
Tower Construction Ltd.	623,540.00	
Project B-1088—North Fernie Bridge No. 299, Highway 3, Contract No. 1—General, Sidewalk addition		
Gunn Construction (1979) Ltd.	85,938.00	Awarded
Jaemar Construction Co. Ltd	88,963.00	
Kingston Construction Ltd.	89,000.00	
Columbia River Steel Services Ltd.	119,427.00	
West Shore Constructors Ltd.	124,900.00	
Inland Bridge Ltd.	157,537.00	
Project B-1147—General Construction "M" Creek Bridge No. 1453, Garibaldi Highway 99, Contract No. 1		
Kingston Construction Ltd.	616,629.00	Awarded
Mutual Construction Ltd.	629,514.00	
Bastion Construction (1981) Ltd.	653,413.00	
Ansha Contracting Co. Ltd.	673,847.00	
Interland Contractors Ltd.	681,691.00	
G.W. Carlson Construction Ltd	695,050.00	
Procan Ltd.	739,246.00	
Project B-1234—Mars Creek Bridge No. 1430, Highway 23, Revelstoke-Mica, Contract No. 1—Substructure		
S.L. Paving Ltd.	862,056.28	Awarded
Goodbrand Construction Ltd.	921,905.00	
Braniff Construction Ltd.	939,276.00	
Hallcraft Construction Co. Ltd.	997,973.00	
Dura Construction Ltd.	1,338,973.00	
Project B-1373—Bonell Creek Bridge Modifications No. 1246, Nanoose Creek Bridge Modification No. 1247, Island Highway 19, Contract No. 2—General		
Bastion Construction (1981) Ltd.	518,710.14	Awarded
G.W. Carlson Construction Ltd.	598,301.00	
Ansha Construction Ltd.	653,347.50	
Goodbrand Construction Ltd	683,184.30	
Dura Construction Ltd.	796,400.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Bridges—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project B-1383—Contract No. 1, Terrace-Prince Rupert Bridge—Slickenside Creek Bridge No. 6714, Polymar Creek Bridge No. 2235, Snowbound Creek Bridge No. 2236, Yellowhead Highway 16		
Procon Builders Ltd.	527,362.23	Awarded
G.W. Carlson Construction Ltd.	557,608.00	
Kingston Construction Ltd.	575,333.50	
Ansha Construction Co. Ltd.	592,760.70	
Dura Construction Ltd.	675,986.00	
Wesco Contracting & Froese Bros. Excavating	808,409.25	
Sygnet Construction Co. Ltd.	851,323.75	
Goodbrand Construction Ltd.	989,983.10	
Project B-1391—Dredging Campbell River Ferry Terminal Contract No. 1		
Dillingham Corp. Canada Ltd.	808,295.00	Awarded
Fraser River Pile Driving Co. Ltd.	1,336,040.00	
Project B-1393—Twidwell Bend Bridge No. 2268, Contract No. 1, Pile Load Test, North East Development Road		
Franki Canada Ltd.	116,445.00	Awarded
Pile Foundation (Alberta) Ltd.	165,000.00	
Fraser River Pile Driving Co. Ltd.	188,150.00	
Project B-1393—Contract No. 2—Twidwell Bend Bridge No. 2268, Northeast Coal Development Road		
Kenyon Construction Ltd. (Alternative A)	2,891,049.00	Awarded
(Alternative B)	2,881,678.00	
Goodbrand Construction Ltd. (Alternative A)	3,108,762.40	
(Alternative B)	3,034,756.40	
Kingston Construction (Alternative A)	3,275,311.12	
(Alternative B)	3,301,039.12	
Jaemar Construction Company Ltd. (Alternative A)	3,370,880.70	
(Alternative B)	3,576,824.70	
Interior Contracting Company Ltd. (Alternative A)	3,530,238.25	
(Alternative B)	3,588,513.25	
Hansa Construction Ltd. (Alternative A)	3,623,578.89	
(Alternative B)	3,706,535.89	
Dura Construction Ltd. (Alternative A)	3,812,494.30	
(Alternative B)	3,798,742.30	
W.F.L. Constructors Ltd. (Alternative A)	4,294,872.24	
(Alternative B)	4,350,422.24	
Tonto Construction Ltd. (Alternative A)	4,295,636.60	
(Alternative B)	4,257,636.60	
Peter Kiewit Sons Co. Ltd. (Alternative A)	5,700,395.75	
(Alternative B)	5,668,565.75	

TENDERS RECEIVED AND CONTRACTS AWARDED

Ferries

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project B-1389—Blubber Bay Ferry Terminal, Contract No. 3, Fill Area and Paving		
Coast Paving Ltd.	197,583.00	Awarded
Edco Construction Co.	254,946.00	
Jack Cewe Ltd.	273,018.64	
Project H-1125—Conversion of M.V. *Princess of Vancouver* to a Roll-on, roll-off vehicle ferry		
Burrard Yarrows Corporation	8,995,000.00	Awarded
Vancouver Shipyards Ltd.	10,819,300.00	
Project M-216—Tsawwassen Ferry Terminal, Contract No. 1, Renovations of Hull Maintenance Building		
Van Vliet Construction Co. Ltd.	120,867.00	Awarded
L. & G. Construction Co. Ltd.	137,483.00	
Alder Industries Ltd.	148,000.00	
Argus Installations Ltd.	165,799.00	
Project T.F.M. 143—Departure Bay Ferry Terminal, Contract No. 3, Electrical Systems		
Western Power Cable Jointing Ltd.	623,327.00	Awarded
Houle Electric Ltd.	675,840.00	
Canpac Installations Ltd.	817,381.00	
Project T.F.M. 143—Departure Bay Ferry Terminal, Contract No. 4, for Upper Ramp approach Berth No. 3		
Kingston Construction Ltd.	539,331.00	Awarded
Regent Construction Co. (1974) Ltd.	562,770.00	
Quinney & Fuller Construction Ltd	567,917.00	
Dura Construction Ltd.	576,722.00	
Project T.F.M. 143—Contract No. 5, Passenger Facilities Buildings at Departure Bay Ferry Terminal		
Cana Construction Co. Ltd.	1,790,000.00	Awarded
G.W. Carlson Construction Ltd.	1,897,000.00	
Dura Construction Ltd.	1,898,700.00	
Crestwood Construction Ltd.	1,911,000.00	
D. Robinson Contracting Ltd.	1,999,000.00	
Quinney & Fuller Construction Ltd.	2,135,536.00	
Project T.F.M. 177—Langdale Ferry Terminal		
Rowgon Construction Ltd.	518,500.00	Not Awarded 1 bid only
Project T.F.M. 188—Vesuvius Ferry Terminal, Contract No. 1, Expansion to Holding Compound		
Duneau Paving Ltd.	277,971.00	Awarded
J.C.R. Construction Ltd.	287,192.00	
Jack Cewe Ltd.	318,636.13	
Webb & Trace Ltd.	327,992.20	

TENDERS RECEIVED AND CONTRACTS AWARDED

Ferries—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project T.F.M. 191—Village Bay Ferry Terminal, Contract No. 1, Berth No. 2 and Fill Areas		
Fraser River Pile Driving Co. Ltd.	1,747,500.00	Awarded
Dillingham Corporation Canada Ltd.	2,083,000.00	
Harbour Pile Driving Co. Ltd.	2,293,505.05	
Project T.F.M. 192—Tsawwassen Ferry Terminal, Contract No. 2, Walkway and Preboarding Building		
Van Vliet Construction Co. Ltd.	2,060,185.00	Awarded
Van Bourne Construction Ltd.	2,128,000.00	
Rowgon Construction Ltd.	2,153,333.00	
Interland Contractors Ltd.	2,230,386.00	
Project T.F.M. 192—Tsawwassen Ferry Terminal, Contract No. 3, Transfer Deck from Berths No. 3 and 4		
Argus Installations Ltd.	1,092,899.00	Awarded
Van Construction, Div. of Van Vliet Construction Co. Ltd.	1,148,211.00	
Jaemar Construction Co. Ltd.	1,149,000.00	
Dura Construction Ltd.	1,218,793.00	
Project T.F.M. 198—Deas Refit Stores Complex, Contract No. 6, Site Utilities		
United Contractors Ltd.	254,796.00	Awarded
Pacific Maintenance and Construction Co. Ltd.	269,320.00	
A & G Construction Ltd.	345,000.00	
Project T.F.M. 198—Deas Refit/Stores Complex, Contract No. 7, Machine Shop Renovations		
L. & G. Developments Inc.	1,648,200.00	Recalled
Delta Construction Ltd.	1,971,000.00	
Project T.F.M. 198—Deas Refit/Stores Complex, Contract No. 8, Welding Shop		
Alfred Horie Construction Co. Ltd. (Alternate A)	412,266.00	Awarded
(Alternate B)	401,136.00	
Seaward Construction (Alternate A)	416,500.00	
(Alternate B)	404,500.00	
Beta Construction Ltd. (Alternate A)	426,835.00	
(Alternate B)	442,730.80	
Interland Contractors Ltd. (Alternate A)	444,000.00	
(Alternate B)	433,500.00	
Jaemar Construction Co. Ltd. (Alternate A)	451,251.00	
(Alternate B)	435,446.00	
Argus Installations Ltd. (Alternate A)	471,480.00	
(Alternate B)	463,142.00	
L. & G. Developments Inc. (Alternate A)	497,950.00	
(Alternate B)	482,267.00	
Project T.F.M. 198—Deas Refit Stores Complex, Contract No. 9, Refit Shop Renovations		
Double V Construction Ltd.	869,856.00	Cancelled
Bengal Construction Ltd.	870,651.00	
Seaward Construction Ltd.	885,446.00	
Alfred Horie Construction Co. Ltd.	891,690.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Ferries—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project T.F.M. 210—Tsawwassen Ferry Terminal, Contract No. 1, Double Decking for Berth No. 4		
Fraser River Pile Driving Co. Ltd.	1,558,000.00	Awarded
Dillingham Corporation Canada Ltd.	1,681,160.00	
Project T.F.M. 211—Departure Bay Ferry Terminal, Stores Building Extension		
T. & B. Construction Ltd.	176,200.00	Awarded
D. Robinson Contracting Ltd.	177,038.00	
G.W. Carlson Construction Ltd.	195,350.00	
Dura Construction Ltd.	210,739.00	
Project T.F.M. 214—Swartz Bay Ferry Terminal, Contract No. 1, Double Decking for Berth No. 2		
Cana Construction Co. Ltd.	1,826,198.00	Awarded
Dura Construction Ltd.	1,936,500.00	
Jaemar Construction Co. Ltd.	2,062,504.00	
Project T.F.M. 218—Complete Installation of Emergency Power Generator of Langdale and Saltery Bay Ferry Terminal		
Western Power Cable Jointing Ltd.	112,589.00	Awarded
Gamma Electric Ltd.	137,000.00	
W.E.S. Electric Ltd.	143,235.00	

Gravel Crushing

Project M-0743—Crushed Granular Aggregate in Stockpile, Contract No. 1—Thunderbird Pit No. 3527A, Cranbrook District		
L.R. Wyles Trucking Ltd.	184,750.00	Awarded
D.M.J. Construction Ltd.	281,000.00	
Johnson's Trucking Western Ltd.	309,200.00	
Argus Aggregate Ltd.	314,000.00	
Cantex Engineering and Construction Co. Ltd.	342,600.00	
Contract No. 2—Government (Playmore) Pit No. 3102A, Nelson		
D.M.J. Construction Ltd.	181,800.00	Awarded
Cantex Engineering and Construction Co. Ltd.	218,800.00	
Argus Aggregate Ltd.	221,580.00	
Johnson's Trucking Western Ltd.	226,800.00	
L.R. Wyles Trucking Ltd.	262,920.00	
Contract No. 3—Carnaby Pit No. P5411D, Smithers District		
Columbia Bitulithic Ltd.	129,828.00	Awarded
D.M.J. Construction Ltd.	138,850.00	
L.R. Wyles Trucking Ltd.	147,125.00	
Johnson's Trucking Western Ltd.	162,320.00	
L.G. Scott & Sons Construction Ltd.	187,250.00	
Argus Aggregates	222,750.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Gravel Crushing—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Contract No. 4—Jack Pine Pit No. 5253, Terrace District		
L.R. Wyles Trucking Ltd.	126,900.00	Awarded
Farko Contracting Ltd.	135,000.00	
D.M.J. Construction Ltd.	138,000.00	
L.G. Scott & Sons Construction Ltd.	141,000.00	
Johnson's Trucking Western Ltd.	151,500.00	
Argus Aggregates Ltd.	206,100.00	
Contract No. 5—Pit No. 5211 on D.L. 5835, Terrace District		
L.R. Wyles Trucking Ltd.	31,900.00	Awarded
L.G. Scott & Sons Construction Ltd.	51,000.00	
Columbia Bitulithic Ltd.	63,800.00	
Johnson's Trucking Western Ltd.	71,800.00	
Contract No. 6—Colpit Lake Pit No. P4782—Williams Lake District		
Cantex Engineering & Construction Co. Ltd.	127,400.00	Awarded
Pete's Development Ltd.	143,600.00	
Quesnel Redi-Mix Cement Co. Ltd.	146,000.00	
H. Williamson Blacktop & Landscaping Ltd.	146,600.00	
D.M.J. Construction Ltd.	158,800.00	
T.R. Crushing Ltd.	180,200.00	
L.R. Wyles Trucking Ltd.	184,200.00	
Johnson's Trucking Western Ltd.	198,100.00	
Argus Aggregates Ltd.	290,000.00	
Inland Contracting-Sweeping Ltd.	295,500.00	
Contract No. 7—Bell Irving No 1, Area 2, Pit 5109, Prince Rupert District		
Island Asphalt Producers Ltd.	161,000.00	Awarded
L.R. Wyles Trucking Ltd.	222,600.00	
Cantex Engineering & Construction Co. Ltd.	274,400.00	
L.G. Scott & Sons Construction Ltd.	275,800.00	
Mackenzie Redi-Mix Co. Ltd.	306,600.00	
Argus Aggregates Ltd.	371,000.00	
Inland Contracting-Sweeping Ltd.	420,000.00	
Johnson's Trucking Western Ltd.	637,000.00	
Contract No. 8—Flatbed No. 1 Pit No. P4302L, Dawson District		
D.M.J. Construction Ltd.	94,200.00	Awarded
Island Asphalt Producers Ltd.	119,000.00	
Mackenzie Redi-Mix Co. Ltd.	139,500.00	
Johnson's Trucking Western Ltd.	160,500.00	
L.R. Wyles Trucking Ltd.	170,400.00	
Cantex Engineering & Construction Co. Ltd.	260,000.00	
Contract No. 9—Donaldson Pit No. P54018 Smithers District		
M.J. Construction Ltd.	99,400.00	Awarded
Cantex Engineering & Construction Co. Ltd.	104,160.00	
L.R. Wyles Trucking Ltd.	105,280.00	
Columbia Bitulithic Ltd.	135,520.00	
Argus Aggregates Ltd.	215,600.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Gravel Crushing—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Contract No. 10—Robinson Lake Trail Pit No. 5238, Terrace District		
Farko Contracting Ltd.	46,000.00	Awarded
D.M.J. Construction Ltd.	58,000.00	
L.G. Scott and Sons	66,000.00	
Johnson's Trucking Western Ltd.	92,480.00	
L.R. Wyles Trucking Ltd.	140,640.00	
Contract No. 11—Logan Lake East Pit No. 2553, Merritt District		
Ptarmigan Gravel Ltd.	53,000.00	Awarded
Pete's Development Ltd.	59,900.00	
D.M.J. Construction Ltd.	85,000.00	
Johnson's Trucking Western Ltd.	96,600.00	
L.R. Wyles Trucking Ltd.	110,000.00	
Contract No. 12—Anderson Pit 2610, Lillooet District		
View Construction Ltd.	117,655.00	Awarded
Johnson's Trucking Western Ltd.	133,475.00	
Cantex Engineering & Construction Co. Ltd.	182,500.00	
Argus Aggregates Ltd.	220,700.00	
L.R. Wyles Trucking Ltd.	374,335.00	
Contract No. 13—Fort Nelson Main Pit 4411A, Fort St. John District		
Cyre Gravel & Concrete Ltd.	54,500.00	Awarded
Johnson's Trucking Western Ltd.	69,400.00	
Mackenzie Redi-Mix Co. Ltd.	72,720.00	
D.M.J. Construction Ltd.	88,400.00	
L.R. Wyles Trucking Ltd.	98,400.00	
Goodbrand Construction Ltd.	99,000.00	
Lorean Enterprises Ltd.	107,580.00	
Columbia Bitulithic Ltd.	127,720.00	
Contract No. 14—Rose Lake South Pit No. 5590, Burns Lake District		
D.M.J. Construction Ltd.	111,750.00	Awarded
Manana Enterprises Ltd.	120,550.00	
L.R. Wyles Trucking Ltd.	139,575.00	
Island Asphalt Producers Ltd.	152,000.00	
Johnson's Trucking Western Ltd.	178,250.00	
Goodbrand Construction Ltd.	189,000.00	
Columbia Bitulithic Ltd.	205,700.00	
Argus Aggregates Ltd.	223,825.00	
Contract No. 15—Moose Crossing Pit No. 5516, Burns Lake District		
L.R. Wyles Trucking Ltd.	97,900.00	Awarded
Manana Enterprises Ltd.	104,900.00	
D.M.J. Construction Ltd.	114,250.00	
Island Asphalt Producers Ltd.	120,500.00	
Cantex Engineering & Construction Ltd.	138,850.00	
Johnson's Trucking Western Ltd.	164,000.00	
Goodbrand Construction Ltd.	182,250.00	
Columbia Bitulithic Ltd.	193,400.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Gravel Crushing—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Contract No. 16—Gabriola and Thetis Islands, Nanaimo District		
Jack Cewe Ltd.	107,520.00	Awarded
Argus Aggregates Ltd.	141,600.00	
Island Asphalt Producers Ltd.	157,440.00	
Contract No. 17—Aeroplane Lake Pit No. P5350, Dease Lake District		
M.R.C. Enterprises Ltd.	124,040.00	Awarded
Cantex Engineering & Construction Ltd.	148,960.00	
L.R. Wyles Trucking Ltd.	197,960.00	
Contract No. 18—Great Lake Summit Pit No. P5302C, Dease Lake District		
L.R. Wyles Trucking Ltd.	149,600.00	Awarded
M.R.C. Enterprises Ltd.	179,800.00	
Cantex Engineering & Construction Ltd.	197,000.00	
Johnson's Trucking Western Ltd.	231,400.00	
Contract No. 19—Cooper Pit No. 2628, Lillooet District		
D.M.J. Construction Ltd.	79,750.00	Awarded
Ptarmigan Gravel Ltd.	83,750.00	
Cantex Engineering & Construction Ltd.	88,250.00	
L.R. Wyles Trucking Ltd.	110,500.00	
Johnson's Trucking Western Ltd.	136,500.00	
Contract No. 20—Strimbold Pit No. P5579, Burns Lake District		
L.R. Wyles Trucking Ltd.	119,900.00	Awarded
D.M.J. Construction Ltd.	148,000.00	
Island Asphalt Producers Ltd.	161,550.00	
Columbia Bitulithic Ltd.	189,470.00	
Goodbrand Construction Ltd.	196,230.00	
Johnson's Trucking Western Ltd.	199,060.00	
Contract No. 21—Six Mile Pit No. 5530, Burns Lake District		
L.R. Wyles Trucking Ltd.	48,300.00	Awarded
Mackenzie Redi-Mix Co. Ltd.	51,900.00	
D.M.J. Construction Ltd.	58,500.00	
Goodbrand Construction Ltd.	70,500.00	
Island Asphalt Producers Ltd.	72,000.00	
Johnson's Trucking Western Ltd.	85,200.00	
Contract No. 22—Boyd Pit No. 2755, 100 Mile House District		
Ptarmigan Gravel Ltd.	95,250.00	Awarded
Pete's Development Ltd.	101,300.00	
Cantex Engineering & Construction Co. Ltd.	136,070.00	
L.R. Wyles Trucking Ltd.	180,550.00	
Contract No. 23—Devil Creek Pit No. 5308, Dease Lake District		
L.R. Wyles Trucking Ltd.	62,800.00	Awarded
M.R.C. Enterprises Ltd.	78,450.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Gravel Crushing—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Contract No. 24—Wright Pit No. 2436, Penticton District		
Ptarmigan Gravel Ltd.	52,500.00	Awarded
D.M.J. Construction Ltd.	67,600.00	
Cantex Engineering & Construction Co. Ltd.	82,750.00	
Argus Aggregates Ltd.	84,475.00	
Johnson's Trucking Western Ltd.	85,350.00	
L.R. Wyles Trucking Ltd.	120,250.00	
Contract No. 25—Pyman Pit No. P2928—Kelowna District		
D.M.J. Construction Ltd.	39,150.00	Awarded
Cantech Enterprises Ltd.	39,270.00	
Ptarmigan Gravel Ltd.	56,250.00	
L.R. Wyles Trucking Ltd.	57,000.00	
Cantex Engineering & Construction Co. Ltd.	73,200.00	
Midvalley Construction Ltd.	78,750.00	
Project M-1156-0001—Crushed Granular Aggregate in Stockpile, Contract No. 1 Seton Portage Hydro Pit No. 2636, Lillooet District		
Cantex Engineering & Construction Co. Ltd.	65,800.00	Awarded
L.R. Wyles Trucking Ltd.	78,120.00	
Enderby Gravel Products Ltd.	93,660.00	
Island Asphalt Producers Ltd.	102,200.00	
Ptarmigan Gravel Ltd.	108,500.00	
Contract No. 2—Sucker Pit No. 2662, Lillooet		
Enderby Gravel Products Ltd.	43,800.00	Awarded
L.R. Wyles Trucking Ltd.	44,850.00	
Cantex Engineering & Construction Co. Ltd.	48,300.00	
Ptarmigan Gravel Ltd.	49,500.00	
T.R. Crushing Ltd.	95,500.00	

Miscellaneous

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project No. C-2901—Construction of Weigh Scale Station at Parksville—Contract No. 2, Island Highway 19		
McCurrie Construction Ltd.	245,400.00	Awarded
K.C. Johnson Construction Ltd.	254,096.00	
Project No. C-3325—Sprinkler System and Water Supply System, George Massey Tunnel, Highway 99		
National Installations Ltd.	213,000.00	Awarded
Kal Sprinkler Co. Ltd.	337,880.00	
Project No. C-3422—Landscape Development Vernon to Swan Lake Junction, Contract No. 2, Highway 97		
Westwind Nursery	252,000.00	Awarded
Cedar Crest Lands (B.C.) Ltd.	279,716.85	
Holland Landscapers Ltd.	312,006.85	
Dave's Landscaping Ltd.	324,099.11	

TENDERS RECEIVED AND CONTRACTS AWARDED

Miscellaneous—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project No. C-3912—Landscape Development of 16th Avenue and S.W. Marine Drive, University Endowment Lands, Vancouver, B.C., 16th and Blanca to S.W. Marine Drive, S.W. Marine Drive Sta. 32 + 92 to Sta. 50 + 40, Contract No. 2		
Jeckway Landscaping Ltd.	285,451.50	Awarded
Johnson's Landscaping Ltd.	338,018.00	
Holland Landscapers Ltd.	378,336.75	
Cedar Crest Lands (B.C.) Ltd.	385,770.50	
Envirotectural Services Ltd.	418,400.00	
Project C-3912—Landscape Development of 16th Avenue, Blanca Street to approximately Sta. 12 + 90, University Endowment Lands, Contract No. 3		
Cedar Crest Lands (B.C.) Ltd.	61,450.00	Awarded
Jeckway Landscaping Ltd.	62,074.30	
Westwind Nursery	63,000.00	
Dave's Landscaping Ltd.	74,002.25	
Envirotectural Services Ltd.	76,502.50	
Johnson Landscaping Ltd.	80,880.25	
T. Moscone & Bros. Landscaping Ltd.	95,964.25	
Enviro Landscaping Ltd.	102,125.00	
Project No. D-0095—Landscape Development of John Road Highways Yard, Contract No. 1		
Joe Brunn Landscaping Ltd.	32,625.96	Awarded
Kimoff Landscaping Ltd.	35,230.50	
Chris Design Landscaping Ltd.	45,119.56	
Nordli Holdings	59,898.31	
Project No. D-3716—Landscape Development of Cole Road Rest Area, Contract No. 3, Chilliwack District		
Cedar Crest Lands (B.C.) Ltd.	85,261.40	Awarded
Jeckway Landscaping Ltd.	86,327.58	
Johnson Landscaping Ltd.	109,053.30	
Project H-0678—Construction Passenger, 70 Automobile Ferry		
Vancouver Shipyards Co. Ltd.	6,525,000.00	Awarded
Bel-Aire Shipyards Ltd.	6,720,000.00	
Burrard Yarrows Corporation	8,995,000.00	
Project J-1103B—Landscape Maintenance: Horseshoe Bay-Lynn Valley Interchange (17 km)		
West Shore Landscaping Ltd.	81,000.00	Awarded
Vane Lawn and Garden Services	93,000.00	
Ekset Contracting Ltd.	97,000.00	
Cedardale Tree Service (1971) Ltd.	173,000.00	
Project J-1401B—Landscape Maintenance: Knight Street Bridge Interchange, Vancouver		
Cedardale Tree Service (1971) Ltd.	36,794.00	Awarded
Vane Lawn and Garden Services	38,000.00	
Ekset Contracting Ltd.	68,000.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Miscellaneous—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project J-1402B—Landscape Maintenance: Highway 99 at Westminster Highway, Cambie Road, and north and south end Oak Street Bridge, Vicinity Vancouver		
Vantec Horticultural Services Ltd.	6,500.00	Withdrawn
Vane Lawn and Garden Services	16,400.00	Awarded
Cedardale Tree Service (1971) Ltd.	17,900.00	
David Hunter Landscape Nurseries Ltd.	17,985.00	
Project J-1403B—Landscape Maintenance: Plantation Beds First Avenue Interchange to McCallum Road Interchange'		
Vantec Horticultural Services Ltd.	18,300.00	Awarded
Vane Lawn and Garden Services	19,600.00	
Project J-1404B—Landscape Maintenance: Cape Horn Interchange Port Mann Bridge—Vancouver Highway 1		
Vantec Horticultural Services Ltd.	4,100	Withdrawn
Vane Lawn and Garden Services	12,800.00	Awarded
Project J-6002—Landscape Maintenance: Blanshard Street, Tolmie Avenue to Saanich Road, Victoria (0.9 km)		
G. & W. Landscaping Ltd.	22,560.00	Awarded
Vane Lawn and Garden Services	42,000.00	
Vic's Landscaping	54,000.00	
Project J-6027—Supply, Deliver and Place AC5 Asphalt Surfacing on Saltspring Island off coast of Vancouver Island		
Hub City Paving Ltd.	88,629.80	Awarded
Jack Cewe Ltd.	101,949.05	
Duncan Paving Ltd.	123,900.00	
Project M-0979-0001—Supply and Deliver MC250 Asphalt Patchmix to Stockpiles on Quadra and Hornby Islands off east coast of Vancouver Island		
Island Asphalt Producers Ltd.	207,360.00	Awarded
Jack Cewe Ltd.	245,040.00	
B.A. Blacktop	267,720.00	
Project M-0979-0002—MC250 Asphalt Patchmix in Stockpile Godey Pit No. 2542, Spiers Pit No. 2545, and Logan Lake East Pit No. 2553, Merritt District		
Cantex Engineering & Construction Co. Ltd.	191,970.00	Awarded
Project M-0979-0003—Supply and Deliver MC250 Asphalt Coldmix to Stockpile, 5 Mile Pit No. 2627, Lillooet District		
Dawson Construction Ltd.	121,590.00	Awarded
Cantex Engineering & Construction Co. Ltd.	127,848.00	
B.A. Blacktop	182,364.00	
Columbia Bitulithic Ltd.	198,240.00	
Project M-0979-004—Supply and Deliver MC250 Asphalt Coldmix in Stockpile at Wright Pit No. P2436 and Peterson Pit No. P2514, Penticton and Merritt District		
Cantex Engineering & Construction Co. Ltd.	97,750.00	Awarded
Dawson Construction Ltd.	107,010.00	
Peter's Bros. Paving (1981) Ltd.	136,330.00	

TENDERS RECEIVED AND CONTRACTS AWARDED

Miscellaneous—*Continued*

Description of Work and Names of Tenderers	Amount of Tenders at Unit Rates Based On Estimated Quantities	Remarks
Project M-0979-0005—Supply and Deliver MC250 Asphalt Cold-mix in Stockpile at Copper Valley Pit No. 2628 and Oregon Jack Pit No. 2609, Lillooet District		
Cantex Engineering & Construction Ltd.	126,489.00	Awarded
Dawson Construction Ltd.	129,517.60	
Project M-0979-0006—Supply and Deliver MC250 Asphalt Cold-mix in Stockpile at Campbell Pit No. 2305 near Cherryville, Vernon District		
Cantex Engineering & Construction Co. Ltd.	93,100.00	Awarded
Penticton Toyota Ltd.	102,445.00	
Project M-0979-0010—Supply and Deliver MC250 Asphalt Cold-mix in Stockpile at Happy's Gulch on Trans Canada Highway 1, Merritt District		
Cantex Engineering & Construction Co. Ltd.	85,200.00	Awarded
Dawson Construction Ltd.	98,250.00	
H. Williamson Blacktop & Landscaping Ltd.	104,700.00	
Mission Paving Services Co. Ltd.	129,600.00	
Columbia Bitulithic Ltd.	145,470.00	

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
REGION 1 North Vancouver	C-0799	Pemberton Meadows Road	Various locations	35.6	Road base preparation in advance of paving contract. Drainage improvements and widening.		100
		Whistler Subdivision Roads	Various locations				
		Pemberton Portage Road	Various locations				
	C-1093	Bayshore Intersection-Hwy. 99	Whistler	0.2	Left turn slot and deceleration slot		100
	C-1168	Highway 99—"M" Bridge	"M" Bridge	0.5	New bridge approaches		30
	B-0677	Highway 99	Golden Dreams Bridge	0.15	New bridge approaches		100
	C-3208	Highway 99	Alpine Drive to Pemberton	27.3	Improve drainage and widen		60
	D-0096	Highway 99	Tunnel Point Rest Area	0.1	Rest area construction		100
	N-0368	Highway 99	Horseshoe Bay to Lions Bay	1.95	Guardrail placement		100
Gibsons	C-0118	Various Roads—Gibsons District	Minor betterments	n/a	Widening, ditching, reconstruction	May 81	100
	C-0800	Hwy. 101—Madeira Park Rd.	at intersection	0.6	Intersection improvements	Sept. 81	100
	C-3632	Malaspina Road	Km 2.2–4.1	1.9	Reconstruction	May 81	100
	N-0369	Sunshine Coast Highway	Gibsons, Madeira Park and Powell River	0.7	Place guardrail	June 81	100
New Westminster	C-0488	Canada Way	Canada Way at Burris	0.20	Reconstruction-widening at intersection	June 81	100
	C-0801	Route 7A Barnet Highway	Barnet Road–North Road	3.50	Resurface	July 81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
New Westminster —*Continued*	C-0803	Route 15 Pacific Highway	32nd Avenue to 40th Avenue	3.3	Reconstruction to improve grade and crossfall.	July/81	100
	C-1052	Glover Road	Fraser Highway to Route 10	1.0	Improve surface for reclassification	Aug. 81	100
	C-1064	Route 17	Tsawwassen Indian Reserve	—	Construct chainlink fence	Jan. 81	100
	C-1173	Route 1	Brunette Interchange to Johnston Interchange	1.5	Machine patching	Mar. 81	100
Chilliwack	C-0156	Hemlock Valley Road	Morris Valley Road to Ski Area	14.8	Drainage improvements various areas widening road.	April/81	100
	C-0804	Rockwell Drive	Greenpoint Park entrance to N. Boundary, Kent Municipality	1.4	Drill, blast, widen, install multiplate, grade revision.	April/81	100
	C-0805	Tower Subdivision Roads	Thistle and Lupine Roads	0.1	Repair slide area	June/81	100
	C-0806	Miscellaneous Paving	Lougheed Hwy. 7, Silverdale	1.7	Recap	July/81	100
			Flats & T.C.H. No. 1, Jones Hill	0.4	Recap	June/81	100
	C-3774	Chilliwack Lake Road	Osborne Road east 0.6 km and 2.1 km west of Pierce Creek to Chilliwack River	5.4	Recap 0.6 km, crush 4.8 km and pave 2.1 km.	April/81	100
	D-0943	Copper Creek Rest Area, Hwy. 3	Copper Creek	—	Prepare site for W. B. Rest Area	June/81	100
	D-1043	Agassiz Mtn. Rest Area, Hwy. 7	Agassiz Mountain	—	Construct rest area with tables and toilets	Sept. 81	100
	D-1078	North Bend Aerial Ferry	Ferry Terminal	—	Widen parking area, prepare site for rest-room facilities.	Oct. 81	100

	N-0371	Guardrail Installation	Various locations—Boston Bar	0.5	Replace 90 pieces, install 107 pieces	Aug. 81	100
	W-0792	Fencing Trans Canada Highway	Various locations Countyline to Silver Creek	15.3	Remove old fence and replace with new	May 81	100
	C-0120A	Rosedale Minor Betterments	Rosedale Foreman Area	—	Various minor improvements	April 81	100
	C-0120B	Popkum Road	T.C.H. North	0.4	Reconstruct, grade revision, and pave	May 81	100
	C-0120C	Agassiz Minor Betterments	Agassiz Foreman Area	—	Various minor improvements	April 81	100
	C-0120D	Rockwell Drive	Trout Creek	0.1	Backfill over culvert	June 81	100
	C-0120E	Hope Minor Betterments	Hope Foreman Area	—	Various minor improvements	Oct. 81	100
	C-0120F	Kerriluk and Johnson Road	Kawkawa Lake Area	1.0	Repave	June 81	100
	C-0120G	Hope Yard Improvements	Hope Yard	—	Clearing and leveling storage areas	May 81	100
	C-0120H	Boston Bar Minor Betterments	Boston Bar Foreman Area	—	Various minor improvements	April 81	100
	C-0120I	Allison Pass Minor Betterments	Allison Pass Foreman Area	—	Various minor improvements, pit cleanup.	May 81	100
	C-0120J	S. Trans Provincial Hwy. 3	Allison Pass Area	15	Regravel shoulders	May 81	100
	C-0120K	Cultus Lake Minor Betterments	Cultus Lake Foreman Area	—	Various minor improvements	April 81	100
	C-0120L	Columbia Valley Highway	Approaches to Frost Creek	0.2	Reconstruct approaches to new bridge	Sept. 81	100
	C-0120M	Hansom & Edwards Road	Chilliwack Lake Road Area	1.4	Widening various locations, slide stabilization.	June 81	100
	C-0120N	Abbotsford Minor Betterments	Abbotsford Foreman Area	—	Various minor improvements	Oct. 81	100
	C-0120O	Fraser Highway	Bradner Road to Station Road	2.4	Paved shoulders	May 81	100
	C-0120P	Mission Minor Betterments	Mission Foreman Area	—	Various minor improvements	April 81	100
	C-0120Q	North Nicomen Road	Parke Road to Clerihue Road	1.2	Clearing right of way	Sept. 81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter. State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Chilliwack —*Continued*	C-0120R	Trans-Canada Highway	Boston Bar Area	—	Repair concrete retaining walls	June 81	100
	C-0120S	Boston Bar	Florence Pit	—	Construct salt shed	June 81	100
	C-0120V	Husband Road and Trembley Island Road	Reconstruct 0.4 km from Hwy. 7	0.6	Clear, construct and gravel		
			West Athey Rd. to Trembley Island	0.6	Regravel	Feb. 82	100
REGION 2 Kamloops	C-0123	Various Roads	Various roads within Kamloops District	28.0	Minor road widening and reconstruction, gravelling, pave bridge and cattleguard approaches, extraordinary patching.	April 81	100
	C-0564	Hillside Connector (Hwy. 5 Ext.—Aberdeen)	Km 92.75–92.25 (on Hwy. 5 segment 1720)	0.3	Base construction, paving, curb and gutter and traffic island construction, guardrail installation.	April 81	100
	C-0814	Agate Bay Road 525	Km 4.8–15.6	3.4	Reconstruction, widen, realign, grade revisions, right of way fencing.	May 81	100
	C-0815	No. 2275—Lac Le Jeune Road	Km 22.5–25.5	1.9	Roadbed construction, gravelling and paving.	April 81	100
	C-2514	No. 1214 Clearwater Valley Road	Km 15.9–25.3	9.4	Base preparation for paving	June 81	100
	N-0373	Various Roads	Various Roads within the Kamloops District	1 365	Guardrail Program—installed 560 pcs.	July 81	100
	W-0344	Various Schedule 2 Highways	Various Schedule 2 Highways within the Kamloops District	56.1	Fencing Program—installed one cattleguard and repaired fence (43.2 km of fence done by rancher).	April 81	100
Salmon Arm	C-0124A	Kyte Rd. No. 108	Km 0–0.85—note that the initial point of Kyte Rd. has changed	0.85	Completion of 1980/81 reconstruction—new diversion with grade revision—widened, ditched and gravelled.	Oct. 80	100
	C-0124A	Sunnybrae—Canoe Point Rd. No. 28	Km 22.4–26.0	3.6	Spot gravelling	Sept. 81	100
	C-0124A	Justin Rd. No. 699	Km 0–0.70	0.7	Regravelled	Sept. 81	100

C-0124A	Taylor Rd. No. 404	Km 0-1.0	1.0	Regravelled	Sept. 81	100
C-0124A	Pachendale Rd. No. 133	Km 0-0.5	0.50	Reconstruction—clearing, excavation, ditching and backfill with gravel to provide 2 m shoulder for pedestrians. One side.	Sept. 81	100
C-0124A	Trans Canada Hwy. 1 at Power Ave.	In connection with highway widening for turn-slots	N.A.	Placement of drainage facilities with catch basins.	June 81	100
C-0124A	Sorrento—Eagle Bay Rd. No. 67	Km 27.5-34.1	N.A.	Spot gravelling of bad spots during Spring break up.	Mar. 82	100
C-0124B	Skimikin Road No. 30	Km 15.04-25.05	10.01	Regravelled	May 81	100
C-0124B	Kamloops-Shuswap Rd. No. 223	Km 26.35-27.0	0.65	Reconstruction—Grade revision, ditching, widening and gravelling	July 81	100
C-0124B	Kamloops-Shuswap Rd. No. 223	Km 0-2.2	2.20	Regravelled	Aug. 81	100
C-0124B	Squilax-Turtle Valley Rd. No. 447	Km 4.0-5.8	0.87	Gravelling portion reconstructed in 1980/81	Sept. 81	50
C-0124B	Duck Range No. 261	Km 3.3-8.75	5.45	Regravelled	July 81	100
C-0124B	Kamloops-Shuswap Rd. No. 223	West of Pinantan Rd.	N.A.	Replacement of two dilapidated cattleguards with two steel cattleguards.	June 81	100
C-0124C	Douglas Lake Rd. No. 292	Km 2.2-3.2	1.0	Repaving with pulvi-mix	Sept. 81	100
C-0124C	Douglas Lake Rd. No. 292	Km 13.0-24.0	11.0	Stumps blown from area previously slashed in anticipation of road widening.	June 81	100
C-0124C	Back Rd. No. 291	Km 4.28-6.28	2.0	Regravelled	Sept. 81	100
C-0124D	Squilax-Anglemont No. 446	Km 8.35-8.65	0.3	Reconstruction of approaches to new Freeman Bridge No. 6085—widening and realignment downstream with some grade revision.—Removal of old fence and replacement with new—83 m.	June 30	100
C-0124D	Squilax-Anglemont No. 446	Km 44.5 to 45.3 —Km 44.5 to 45 constructed by subdivision developer. —Km 45.0 to 45.3 by M.O.H.	0.3	Reconstruction—new diversion—widened, realigned, ditched and gravelled with revised grade.	Aug. 81	90

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Salmon Arm	C-0124D	Evans Rd. No. 141	Km 0-2.44	2.44	Regravelled	Sept. 81	100
—Continued	C-0124E	Stadniki Rd. No. 665	Km 0-0.4	0.4	Slashing and reditching in preparation for road reconstruction.	June 81	100
	C-0124E	Vernon-Sicamous No. 97A	Km 23.50 of Seg. 1124	N/A	Assisted with improvements to Ministry of Highways' Rest Area.	Sept. 81	100
	C-0124E	Cambie-Solsqua No. 618	Km 6.0-6.3	0.3	Completion of an ongoing project to reconstruct this road. Widened, ditched and gravelled.	June 81	100
	C-0124E	Teto Rd. No. 671	Km 0-0.2	0.2	Reconstructed — slashed, ditched, widened and regravelled with some realignment.	Sept. 81	100
	C-0124E	Clancy Frontage No. 601.1	Km 0-0.34	0.34	Reconstruction — slashed, ditched, widened and gravelled.	July 81	100
	C-0816	Pre-engineering for improvements to various roads	Numerous locations	N/A	Doing survey work necessary to prepare right of way plans prior to road reconstruction.	Apr. 81	Ongoing
	C-0817	Trans-Canada Hwy. 1	Monte Creek to Revelstoke Hwy. District boundary	23.6	Gradall ditching by contract	Apr. 81	100
	C-0817	Pre-engineering	Various roads	N/A	Survey work—office and field	Apr. 81	N/A
	C-0818	Trans-Canada Hwy. 1 and Power Avenue Turn-slot	Sub. 0935—Km 80.0-80.37	0.37	Reconstruction — widening and repaving to accommodate left turn slots.	May 81	100
	C-0819	Trans-Canada Hwy. 1	Salmon Arm east hwy. boundary to Salmon Arm west hwy. boundary — miscellaneous locations	2 134 (Tonnes)	Machine patching by contract	June 81	100
	C-0819	Kamloops-Vernon Hwy. 97	Seg. 1125—Km 13.0 to 18.0 (misc. locations) and Km 45.0	385.3 (Tonnes)	Machine patching by contract.	July 81	100

C-0819	Cambie-Solsqua No. 618	Km 7.6 to 7.8 (Tonnes included in Hwy. 1 total)	0.2	Machine paving of the approaches to Cambie Bridge and out to Hwy. 1.	July/81	100
C-0820	Pre-engineering	Various roads.	N/A	Survey work—office and field.	Apr./81	N/A
C-0820	Tappen Valley No. 33	Km 5.0–5.32	0.32	Pave with pulvi-mix a part of the road rebuilt after "fault".	Aug./81	100
C-0820	Salmon River No. 360	Miscellaneous locations	N/A	Grader patching with pulvi-mix.	July/81	100
C-0820	Heywood-Armstrong No. 341	Armstrong Municipality	0.8	Reconstruction — slashed, fenced, ditched, widened and gravelled.	May/81	100
C-0820	Hilliam No. 424	Km 0–0.73	0.73	Regravelled	Aug./81	100
C-0820	Douglas Lake No. 292	Km 18.03–18.83	0.8	Regravelled	July/81	100
C-0820	Monte Lake No. 293	Km 0–0.70	790 m	New fence to replace old in preparation for road widening.	May/81	100
C-0820	Line 17 No. 146	Km 0.21–0.89	800 m	New fence to replace old in preparation for road widening.	July/81	100
C-0820	Morgan Pit No. 2282	Fenced east boundary of stockpile area.	210 m	Constructed fence between Chase-Falkland Rd. and Morgan stockpile area.	May/81	100
N-0374	Trans-Canada 1	Sub. 0950-Hwy. 97B to Hwy. 97A	1 190 m	Placement of Type A guardrail where required and removal of some Type B guardrail.	Oct./81	Con't Project
W-0345	Schedule 2 Fencing—	Rebuilding of existing farm fencing according to Ministry Specs.				Con't Project
	Trans-Canada 1	1 location	4.21	Fence replaced by contract	June/81	100
	Kamloops-Vernon No. 97	6 locations	5.21	Fence replaced by contract.	July/81	100
V-1166-24B	Salmon Arm-Enderby No. 24B (Auto Rd.)	Work done by Salmon Arm Municipal Crews.	N/A	Cost sharing between Ministry of Highways and salmon Arm Municipality.		
V-1167-282B	Bridge Rd. No. 282B (Pine St.–Chase)	Work done by Chase Municipal Crews.	N/A	Cost sharing between Ministry of Highways and Chase Municipality.		
B-1027	Vernon-Sicamous No. 97A	Concrete wall—38 m long by 2 m high by 0.6 m thick.	38 m	Construction of stabilization wall between Hwy. 97A and Mara Lake to prevent erosion.	Oct./81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Salmon Arm —*Continued*	B-1027	Kamloops–Shuswap No. 223	Km 6.9 at Niskonlith Creek	N/A	Dismantled Niskonlith Creek Bridge and replaced with a Multi-plate pipe arch. 18 m. long by 3.4 m. wide by 2.0 m. high.	Mar./82	100
Vernon	C-0267	Rte. 6 Vernon-Slocan	Km 40.33–65.33	20.0	R.C. Realignment & widen	Nov./79	100
	C-0125A	No. 142 Baker Hogg	Km 0.00–1.40	1.4	Reconstruct, gravel	Aug./81	100
	C-0125B	No. 72 Gardom Lake	Km 2.09–2.69	.6	Reconstruct, gravel	Sept./81	90
	C-0466	No. 75 Lumby-Mabel Lk.	Km 31.47–36.06	4.5	Reconstruct, realign, widen	May/81	30
	C-0468	No. 49 Grandview Bench	Km 5.90–6.90	1.0	Reconstruct	Aug./81	90
	C-2658	No. 138 Westside Rd.	Km 34.05–39.55	5.5	Reconstruct, realign, widen	Aug./81	100
	C-0466	No. 75 Lumby-Mabel Lk.	Km 0.00–2.58	2.58	New P.M. on Shoulders, sidewalk	Aug./81	100
	C-0829	No. 142 Baker Hogg	Km 0.00–1.40	1.40	New P.M. surface	Aug./81	100
	C-0829	39th Avenue	Km 0.00–.07	.07	New P.M. surface	June/81	100
	C-0829	No. 30 Commonage	Km 1.79–3.29	1.50	New P.M. surface	June/81	100
	C-0829	Hwy. 97 South	Km 23.10–23.30	.20	New P.M. surface	June/81	100
Penticton	C-0475	Princeton-Summerland Road No. 40	Km 15.5–34.7	19.2	Widen, Realign and Pave	1980	40
	C-0475	Princeton-Summerland Road No. 40	Km 34.6–35.2	0.6	Widen, Realign and Reconstruct	1981	75
	C-0475	Princeton-Summerland Road No. 40	Km 40.3–42.0	1.7	Realign and Reconstruct	1981	100
	C-3660	Kruger Hill-Highway No. 97	C.P.R. Crossing West	5.1	Additional third lane	1978	60
	C-0126C	OLIVER AREA Willowbrook Road No. 62	White Lake to subdivision	(715 m)	Widen, Gravel and Pave	1981	100

	C-0126A	PENTICTON AREA 8th Avenue, Okanagan Falls No. 70-8	Connection to new Hotel	(150 m)	Widen, Gravel and Pave	1981	100
	C-0126B	PENTICTON AREA Lyons Road, Naramata No. 260	Smithurst Road to subdivision	(140 m)	New Construction and Gravelled	1981	95
	C-0472	PRINCETON AREA Airport Road Connection No. 126	Airport Road to new School	(140 m)	Widen, Gravel and Pave	1981	100
Merritt	C-0476	No. 178 Meadow Creek Road	Km 19.23–23.77 Km 26.90–28.50	4.54 1.60	Clear and grub right of way	May 81	100
	C-0476	No. 178 Meadow Creek Road	Km 22.46–23.77	1.31	Widening, realignment and grade revision—surface to blacktop	July 81	100
	C-0476	No. 178 Meadow Creek Road	Km 26.90–28.50	1.60	Widening, realignment and grade revision—surface to blacktop	June 81	100
	C-3796	No. 5 S. Princeton–Kamloops	Km 75.96–76.76	0.80	Surface to blacktop	May 81	100
	C-0127A	No. 5 N. Merritt–Kamloops	Km 4.0–6.0 on right Km 4.0–6.9 on left Km 6.0–8.0 on right Km 6.9–8.0 on left Km 8.8–10.1 on left and right	2.00 2.90 2.00 1.10 0.40	Reconstruct shoulder and lay Crush Reconstruct shoulders (crush required) Reconstruct shoulders (crush required)	April 81 May 81 Oct. 81 Oct. 81	100 90 90
	C-0127B	No. 151 Botanie Creek Road	Km 7.2–9.2 Km 9.2–10.9	2.00 1.70	Reconstruct Clear & Grub right of way	July 81 Aug. 81	100 100
	C-0127D	No. 14 Coalmont Road	Km 7.2–7.7 Km 13.3–13.6	0.50 0.30	Reconstruct fill failure Finish Rock cut	Aug. 81 Aug. 81	100 100
	C-0127E	No. 14 Coalmont Road	Km 14.0–14.1	150 m	Install binwall	June 81	100
	C-0127F	No. 43 Lindley Creek Road	Km 1.1–3.9	2.80	Realignment and grade revision	May 81	100
	N-0378	No. 1 Trans Canada Highway	Miscellaneous sections	1 760 m	Install 690 mm guardrail		100
	W-0349	No. 5 Princeton–Merritt	Km 52.08–53.23 Km 55.60–57.15	1.15 1.55	Schedule 2 fencing—640 posts installed	July 81	100
			Km 74.00–75.43 Km 78.72–80.40	1.43 1.68	Schedule 2 fencing—613 posts installed	May 81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Merritt —*Continued*	W-0349	No. 5 Merritt - Kamloops	Km 21.52–22.40	0.88	Schedule 2 fencing—350 posts installed.	Mar./82	100
			Km 23.47–24.33	0.86			
			Km 35.20–39.65	4.45	Schedule 2 fencing—835 posts installed.	May/81	100
			Km 45.20–47.55	2.35	Schedule 2 fencing—528 posts installed.	July/81	100
	C-0203	No. 1 Trans Canada Highway	Km 108.39–108.24	152 m	Install binwall	Feb./82	85
Lillooet	C-0824	Highland Valley	Sawmill Corner - Suicide Corner	5.2	New—clearing and grubbing	Jan./82	100
	C-0270	Gun Lake	D.L. 6485 - D.L. 4823	2.3	New—clearing and grubbing	June/81	100
	C-4170	Duffey Lake	Km 22.0–29.0	7	Reconstruction—realignment	Aug./81	75
	C-0826	Lillooet–Cache Creek	Pavilion Overpass Completed	.8	Reconstruction—realignment	July/81	100
100 Mile House	C-0272	Canim–Hendrix No. 318	From Eagle Creek Bridge to Hendrix Lake Townsite	35	Completed Eagle Creek hill, widened and realigned corners from Eagle Creek to Hendrix Lake, gravelled newly constructed portions.	June/81	85
	C-0827	Clinton–Pavilion No. 11	From end of pavement on Clinton—Pavilion to Jesmond Road. junction	16	Some new construction, gravelled, patched, shouldered and paved by Regional Drum Mix.	April/81	100
	C-0142	Highway 97–Tatton Station	Highway 97, Tatton Station intersection	600 m	Removed cut-bank for site distance and installed right turn slot at Tatton Road.	Aug./81	90
	C-4176	Highway 24–Little Fort	Horse Lake–Highway 24 intersection to Bridge Lake. Machette Lake Road to Lac Des Roche	20	Gravelled and stabilized constructed portion, cleared portion of right of way.	June/81	5
	C-0828	Miscellaneous Roads–100 Mile House District	Highway 97, Canim Lake intersection Tatton Station railway crossing Bjornson Road Park Motel	3	Installed traffic island at Canim Lake, Highway 97 intersection. Realigned railway crossing at Tatton Road. Constructed access to Lac La Hache sewage lagoon at Bjornson Road. Drainage easement at Park Motel.	Sept./81	100

Kelowna	C-0130	Several roads	Area "A", Kelowna	15.61	Sealcoating	July/81	100
		Several roads	Area "B", Westbank	4.75	Sealcoating	Aug./81	100
		Several roads	Area, "C", Winfield	4.61	Sealcoating	Aug./81	100
		Brent Road No. 224	Entire length	0.76	Reconstruct and pave	July/81	100
		Fish Lake Road No. 233	Several sections	1.00	Drill and blast, re-gravel	July/81	100
		Harold Road No. 361	Entire length	0.37	Reconstruct and pave	July/81	100
		Stevens Road No. 184	Km 1.1–1.5	0.40	Reconstruct and pave	June/81	100
		McDougall Road No. 181	Km 0.0–0.40	0.40	Reconstruct and pave	June/81	100
		Shannon Lake Road No. 189		0.1	Drill and blast to widen one cut	Aug./81	100
		Finch Road No. 399	Entire length	2.3	Re-shape and gravel	Aug./81	100
	C-2660	Westside Road No. 172	Km 18.65–23.34	4.69	Drilling and blasting—reconstruct and crush gravel.	Sept./81	90
	C-4165	Glenrosa Road No. 207	At junction Gates Road No. 211	0.5	Complete reconstruct	Mar./82	50
		Fish Lake Road No. 233	At junction Princeton Ave. No. 480R	0.30	Complete reconstruct	Mar./82	80
	C-4163	Lodge Road No. 14	Km 0.60–1.75	1.15	Reconstruct and gravel and fencing	Aug./81	75
		Beaver Lake Road No. 18	Several locations	4.0	Re-shape and gravel	July/81	100
		Bottom Wood Lake Road No. 16	Km 0.0–3.67	3.67	Fencing	Oct./81	10
		Route No. 97	Several locations	3.20	Re-cap—Class B asphalt	June/81	100
		Oyama Road No. 981	Bridge approaches	0.75	Re-shape and pave	June/81	100
	C-3805	Lewis Road No. 85	Km 0.0–0.70	0.70	Reconstruct and gravel	July/81	100
		Belgo Road No. 78	Km 2.79–3.85	1.06	Reconstruct and gravel	July/81	100
		Sexsmith Road No. 43	Km 1.25–1.65	0.40	Gravel and pave	Aug./81	100
	N-0376	Routes No. 97 and No. 33	Several locations	1.4	No-post guardrail program	Aug./81	60
REGION 3 Nelson	C-2559	Highway 3A Nelson–Balfour	Km 11.4–11.7	0.3	Realign, widen and improve	April/80	75
	C-2559	Highway 3A Nelson–Balfour	Km 4.9–5.3	0.4	Realign, widen and improve	May/80	80
	C-0502A	Samsonoff Road No. 305	Km 0.0–1.3	1.3	Realign, widen and improve	May/80	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Nelson —*Continued*	C-0502B	Bonnington Road No. 32	Km 1.2–1.4	0.2	Widen and improve	May/81	100
	C-0502D	South Sheppard Road No. 294	Km 0.9–1.0	0.1	Widen and improve	Sept./81	100
	C-0502E	Rogers Road No. 334	Km 0.5–0.6	0.1	Widen and improve	Aug./81	100
	C-0834	Taghum Interchange			Traffic island and control		100
	C-0503	Sesame Street No. 67	Km 0.0–0.5	0.5	New construction	July/81	100
	C-0835	Upper Passmore	Km 5.4–5.7	0.3	New construction	May/81	60
	C-0504	Wildhorse Bluffs	Km 0.2–0.4	0.2	Widen and improve	Sept./81	100
	C-0204	Highway 3A Nelson–Balfour	Miscellaneous	2.0	Shoulder widening and paving	Aug./81	100
	C-0502B	Highway 3A Bonnington			Improve sight distance	Mar./82	100
	C-0503B	Highway 6 Passmore Slide Area			Stabilize road in slide area	Mar./82	100
Rossland	N-0382	Blueberry–Paulson	Warranted section Highway 3	1 730 m	Guardrail installation	Sept./81	100
	C-0837A	Meadowbrook Intersection	Junction Meadowbrook Road and Highway 3			May/81	100
	C-0837B	Columbia Road Intersection	Junction of Columbia Road and Highway 3			May/81	100
	C-0837C	Lower China Creek Road, Station Road, Columbia Gardens Road, Stang, Tamarac, Jefferson, Brown, Webster and Barclay	Roads in Fruitvale and Genelle Area	5.4	New pavement	Sept./81	100
	C-0836	Wellington Street Culvert–Trail Creek	Junction Wellington Street and Trail Creek	100 m	Additional construction to increase capacity.	Oct./81	100

Grand Forks	B-0254	Castlegar Ferry Ramp	Robson terminal	73 m	Replace wooden ramps.	May/81	90
	C-3666	Rock Creek Kelowna Highway 33	Reconstructed Km 1.5–12.5	11.0	Reconstructed and paved badly aligned and severely deteriorated section of highway.	April/81	98
	C-0019	Gilpin Road No. 28	Reconstruct and widen. Km 3.17–9.87	6.7	Continuing reconstruction of narrow road to school bus standard.	April/81	50
	N-0383	C.N. Highway 3	Guardrail installation. various sections	0.73	690 mm guardrail at 10 locations	June/81	100
	W-0352	C.N. Highway 3 and Rock Creek Kelowna Highway 33	Fence renewal at various locations	13.0	Repairs at 14 locations	April/81	100
New Denver	C-0508	Nakusp Area Roads	Km 69.77–70.75 shoulder wide	1.28	Shoulder widening	July/81	100
	C-0020	Highway 6. Monashee Reconstruct	Monashee Section	2.0	Reconstruct	Aug./81	98.4
	C-0839	Argenta–Johnson Landing	Argenta Section	2.0	Reconstruct	Sept./81	100
	C-0840	Highway 6. Pre-emption Bridge	Km 44.5–45.5	1.0	New construction bridge approaches	Aug./81	93.7
	N-0384	Guardrail Installation	Throughout District		Guardrail installation.	Oct./81	98.7
Cranbrook	C-0841	Cranbrook – Kimberley–Yahk Streets and Roads	Various locations	27.7	Reflush existing subdivision roads	June/81	100
	C-0841	Cranbrook – Kimberley–Yahk Streets and Roads	Various locations	11.5	New double flushcoating for existing subdivision roads.	June/81	100
	C-0135	Cranbrook – Kimberley–Yahk Streets and Roads	Various locations	10.2	Reshape and gravel with select material in preparation for flushcoating.	May/81	100
	C-0135	No. 32 Lazy Lake Road	Km 0.6–1.0	0.4	Reshape, gravel and road mix paving	July/81	100
	C-0135	Cranbrook Area Streets and Roads	Various locations	0.8	Reconstruction, diversion widening, realignment, grade revision, etc.	May/81	100
	C-0843	No. 8 Mission Road, No. 16 Mission Wasa Low Road	Km 0.0–1.2 on No. 8 Mission Road and Km 0.7–3.2 on No. 16 Mission Wasa Low Road	3.7	Reconstruction, widening, realignment, grade revision, pit run gravel.	July/81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Cranbrook —*Continued*	C-0842	No. 72 Pighin Road	Km 2.7–4.6	1.9	Reconstruction, widening, realignment, revision, pitrun.	May/81	100
	C-0135	Southern Transprovincial Highway 3	Km 88.2–88.6	0.4	Left turn, decelleration lane road mix	July/81	100
	C-2762	No. 18 St. Mary's Lake Road	Km 11.9–13.4	1.5	Reconstruction, diversion, widening, realignment, grade revision.	May/81	100
	N-0385	Southern Transprovincial Highway 3	3.7 km from west boundary of Cranbrook Highways District	127 m	Replace 46 cm guardrail with 69 cm no post guardrail.	Sept./81	100
	C-0205	No. 628-R Cranbrook Arterial	Intersection of Cranbrook City Streets and the arterial Highway	11	Wheel chair drop curbs installed	Oct./81	100
Fernie	C-0027	Elk Valley Road	Km 6.25–15.21	9.00	Reconstruction widening of shoulder and ditching.	June/81	64
	C-0136	Asphalt Storage Tanks–Sparwood	Sparwood Yard		Construction asphalt tank and walkway	Aug./81	100
		Asphalt Storage Tanks–Jaffray	Jaffray Yard		Construction asphalt tank and walkway	Sept./81	65
		Spring Fence Repair	Highway 3 and 93 from U.S.A. Border to Elko and Elko to Wardner	64.0	Reconstruction repair fences from winter damages.	April/81	100
		Jaffray–Grasmere Roads	Baynes Lake Loop	0.50	Reconstruction, inverted prime	July/81	100
			Stirling Road	0.90	Reconstruction, inverted prime	July/81	100
			Edwards Road	0.50	Reconstruction, inverted prime	July/81	100
			North Star Road	0.40	Reconstruction, inverted prime	July/81	100
			Jaffray Shop	0.20	Reconstruction, inverted prime	July/81	100
			Rosen Lake Road	1.50	Reconstruction, inverted prime	July/81	100
			Rosen Lake Access	0.10	Reconstruction, inverted prime	July/81	100
			Audia Road	0.30	Reconstruction, inverted prime	July/81	100

		Waldo Road	Km 0.00–3.18	3.18	Reconstruction, gravel and ditch	April/81	95
		Rock Creek Road	Km 0.00–2.06	2.06	Reconstruction, gravelling and apply liquid calcium.	May/81	100
		Kikomun Newgate Road	Km 30.15–35.15	5.00	Reconstruction, gravelling and apply liquid calcium.	May/81	100
		Bertrand Road	Km 0.00–0.55	0.55	Reconstruction apply cold mix	June/81	100
		Cokato Road	Km 0.00–2.41	2.41	Reconstruction, sand seal	Aug./81	100
		Ski Hill Road	Km 0.00–1.17	1.17	Reconstruction, sand seal	Aug./81	100
		Elk Street (Hosmer)		0.20	Reconstruction, sand seal	July/81	100
		Main Street (Hosmer)		0.30	Reconstruction, sand seal	July/81	100
		Dowsing Ave. (Elko)		0.10	Reconstruction, sand seal	July/81	100
		Procter Ave. (Elko)		0.10	Reconstruction, sand seal	July/81	100
		Colomb St. (Elko)		0.10	Reconstruction, sand seal	July/81	100
		Kyrke St. (Elko)		0.40	Reconstruction, sand seal	July/81	100
		Alexander Ave. (Elko)		0.20	Reconstruction, sand seal	July/81	100
		Procter Ave. (Elko)		0.10	Reconstruction, sand seal	July/81	100
		C.P.R. Station Road (Elko)		0.20	Reconstruction, sand seal	July/81	100
		Martha Road		0.48	Construction—construct, ditch and gravel.	Nov./81	40
		Hosmer–Fernie Road		0.78	Construction, clearing and ditching	Oct./81	10
		Rock Creek Road		2.06	Reconstruction, ditch and gravel	April/81	100
		Dock Road		0.21	Construction, ditch and rough grade	Oct./81	40
		Salt Shed Elko	Elko Sand Pit		Construction—new salt shed	Oct./81	65
	C-0511	S.T.P. Highway 3	Carbon Creek Bridge Approaches Subdivision 1395—Km 74.40–74.60	0.20	Reconstruction—realignment and paving.	June/81	100
	C-1061	S.T.P. Highway 3	Carbon Creek Bridge Approaches Subdivision 1395—Km 6.00–8.00	2.0	Reconstruction—fill washouts and repave.	June/81	100
	C-1123	Elk Valley Highway 4	Wilson Creek Bridge Approaches	0.06	Reconstruction—build new approaches to bridge over Cummings Creek.	Nov./81	5
	C-3069	Corbin Road	Km 0.00–3.90	3.90	Reconstruction, realignment, ditch and gravel.	May/81	30

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter. State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Fernie *—Continued*	N-0386	Highway 93 Elko–Roosville	Km 12.00–14.00	2.00	Reconstruction—replace 460 mm guardrail with 690 mm guardrail.	Oct./81	100
	W-0354	S.T.P. Highway 3	Subdivision 1385—Km 35.35–43.20	7.85	Reconstruction—replace old fence with new fence.	May/81	100
	C-0204	S.T.P. Highway 3	Elko Underpass	—	Construction—walkway under Elko Overpass bridge.	July/81	100
	B-1082	Elk Valley Highway 4	Wilson Creek	0.03	Construction—install Acrow Bridge	Sept./81	100
	B-0999A	Carbon Creek Bridge Removal	Carbon Creek Bridge	0.01	Reconstruction—remove old bridge at Carbon Creek.	Mar./82	90
Golden	C-0137A	Steamboat Mount Road No. 98	Km 0.0–1.8	1.8	Reconstruction—clearing and grubbing, widening and re-alignment.	July/81	100
	C-0137B	Brisco Road No. 9	Km 2.3–3.3	1.0	Reconstruction—widening re-alignment, fencing and gravelling.	July/81	100
	C-0137C	Campbell Road No. 7	Km 1.0–1.8	0.8	Paving to upgrade road surface	Sept./81	100
	C-0137H	Canal Flats Streets No. 210	Canal Flats Townsite	2.0	Paving to upgrade various streets	Oct./81	100
	C-0137E	Dorney Road No. 85	Km 0.5–1.5	1.0	Reconstruction-widening and gravelling	May/81	100
	C-0137K	15th Avenue No. 78	Km 0.6–1.0	4.0	Reconstruction-widening, gravelling and paving	May/81	100
	C-0137L	Grainger Road No. 61	Km 2.3–3.2	0.3	Reconstruction-widening and gravelling	Sept./81	
	C-0846	Moberly Branch Road No. 38	Km 0.5–0.9	0.4	Reconstruction-widening, re-alignment and gravelling		100
	N-0387	Toby Creek No. 4	Various warrants Toby Creek Road No. 4	18	Placing Type "A" guardrail in accordance with warrant indices.	Aug./81	100
	C-0845	Windermere Street No. 220	Windermere—Townsite	4.5	Paving to upgrade various streets	June/81	100
	C-0512	K.C. Highway 95	Km 50.0–87.0	37	Shoulder widening	April/81	100
	C-0844	T.C. Highway 1 West	Km 3.0–3.2	0.2	Reconstruction-rebuilt fill slope to arrest shoulder sloughing.	Aug./81	100
Revelstoke	C-3755	No. 31 Balfour–Kaslo–Galena Bay Highway	(Armstrong Lake) Km 18.51–19.61	1.10	Reconstruction (re-alignment and grade revision)		50

	C-3755	No. 31 Balfour–Kaslo–Galena Bay Highway	Km 28.34–30.34	2.0	Reconstruction (re-alignment and grade revision).		30
		No. 206 Clough Road	Km 3.55–3.70	0.15			10
		No. 800 Beaton–Armstrong Lake Road	Km 0.00–2.0	1.0	Reconstruction (re-alignment and shoulder widening)		10
		No. 505 Lennard Drive	Km 0.00–0.52	0.52	Reconstruction (grade revision)		100
		No. 537 Sunnyside Road	Km 0.00–0.16	0.16	Reconstruction (grade revision)		100
		No. 611 Greely Road	Km 0.23–0.50	0.27	Reconstruction (re-alignment, grade revision and installation of 2–120 cm culverts on Hamilton Creek).		100
Creston	C-0517	Pilot Bay	Km 0.00–0.84	0.84	Road reconstruction, culvert installation, gravelling	July/81	100
	C-0139	Minor Betterment District Roads	Mallory, Sommerfeld, Crusher, Sinclair, Canyon-Porthill, Samuelson	3.3	Ditching	May/81	100
	C-0139	Minor Betterment District Roads	Pump, Uri, Ferner, Duck Lake, Sanca Park	2.1	Gravelling	June/81	100
	C-0139	Minor Betterment District Roads	Creston area	—	Culvert installation	April/81	100
	C-0852	Area Roads.	Hollowink, Well spring, Robson, Riondel, Lakeview Junction	1.2	Culvert installation, road reconstruction, clearing.	May/81	100
	C-0852	Area roads.	Hollowink, Evans, Reclamation, Nicks Island N., Sinclair, Mallory, Creston-Lister, Sommerfeld, Canyon-Porthill, Creston-Erickson, Beam, Lakeview, Cory		Road widening, gravelling, road base stabilization and culvert installation.	April/81	100
				23.26			

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Creston —*Continued*	C-0853	Creston-Erickson, Short	Km 0.00–1.19—Km 0.00–0.50	1.69	Gravelling, fencing, ditch construction, road construction, road widening, clearing.	Mar/81	50
	C-0854	Cory	Km 00.00–2.07	2.07	Shoulder widening	June/81	100
	C-0855	Abbey	Km 0.85–1.33	0.48	Clear and grub, culvert installation, fencing.	June/81	20
	C-0856	Snider	Km 3.99–4.37	0.38	Road construction, gravelling, culvert installation.	July/81	100
	C-0857	Lakeview	Km 3.45–4.35	0.90	Fencing, clearing and grubbing	May/81	10
	C-0858	Creston Arterial	Km 69.44–69.92	0.48	Wheelchair curb drops	June/81	100
	C-0859	Packing Shed	Km 0.49–0.95	0.46	Clearing, grubbing, fencing, roadbed construction, ditch, gravelling.	Aug./81	100
	N-0389	Highways 3 and 3A	Creston and Kootenay Lake area	1.2	27-inch No-post guardrail installation	Aug./81	100
	C-0851	Highways 3 and 3A	East side of Salmo–Creston Highway 3 and Kootenay Lake area	7.0	Shoulder reconstruction	July/81	100
	C-0204	Duck Creek Road	Km 1.0 north of Highway 3A	1.0	School sidewalk	Oct./81	100
REGION 4							
Prince George	W-0356	Schedule 2 Highways	Yellowhead and Cariboo	6	Fencing		100
	N-0429	Routes 97 and 16E	P.G. Bypass, Dome Cr. Hill	2.2	Guardrail installations		100
	C-0861	Norman Lake Road	Km 7–10	3	Realignment grade revision		30
	C-0862	Tabor Lake East Road	Km 1–2	1	New construction		50
	C-4180	Upper Fraser Road	Newlands–Upper Fraser	17.6	Realignment grade revision		70
	C-4181	Miscellaneous District Roads		25.1	Construction widen and gravel		80

Quesnel	C-4184	Longworth Access	Km 4.0–5.9	1.9	Re-construction, gravelling		80
	C-0936	Queensway Arterial	Through South Fort George		Widening		100
	C-0865	Barkerville Highway 26	McLarry Revision at Cottonwood	1.6	New construction–new route		100
	C-0445A	Merz Road No. 233	Km 0.00–0.50	1.87			100
		Vernon Road No. 671	Km 0.00–0.74	0.50	New construction–new route		100
		Mills Road No. 211	Km 0.00–0.32	0.74	Recoastruction		100
		Waccan Road No. 344	Km 0.00–0.16	0.32	Reconstruction		100
		Bradford Road No. 879	Km 0.00–1.00	0.16	Reconstruction		100
				1.00	Gravelling		
		Booth Road No. 156	Km 0.00–0.29	0.29	Gravelling		100
		Gemini Road No. 802	Km 0.00–0.10	0.10	Gravelling		100
		Loop Road No. 155	Km 0.00–0.13	0.13	Gravelling		100
		Claymine Road No. 154	Km 0.00–0.50	0.50	Gravelling		100
		Cariboo Highway 97	Dragon Lake Hill	1.50	Guardrail		100
	C-0867	Quesnel–Blackwater Road No. 58	Various sections	16.00	Reconstruction		100
		Punchaw Road No. 86	Km 0.00–11.26	11.26	Reconstruction		100
		Quesnel–Blackwater Road No. 58	Various sections	15.0	Dust control		100
		Fraser Road No. 32	Various sections	15.0	Dust control, calcium		100
		Nazko Road No. 59	Gillies Crossing	3.5	Reconstruction		100
		Nazko Road No. 59	Various sections	15.0	Dust control		100
	C-0141A	Rawling Road No. 197	Various sections	1.0	Ditching		100
		Nazko Road No. 59	Various sections	11.0	Fencing and cattleguards		100
	C-0866	Barkerville Highway 26	Km 34.0–57.3	23.3	Shoulder widening		100
	N-0430	Cariboo Highway 97	Cottonwood Hill	0.5	Guardrail		100
	C-0864	Capsite Road No. 841	Km 0.00–0.80	0.80	New construction–new route		100
		Chew Subdivision		1.70	Ditching		100
		Wolfe Road No. 83	Km 0.00–0.50	0.50	Ditching		100
		McRae Road No. 208	Km 0.00–0.30	0.30	Ditching		100
	C-0445B	Quesnel–Hydraulic No. 60	Slide zone	2.50	Reconstruction		100

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Quesnel *—Continued*		Ernst Road No. 834	Various sections	1.50	Reconstruction		100
		Gook Road No. 30	Km 0.00–3.00	3.00	Shoulder widening		100
		Quesnel–Hydraulic No. 60	Km 0.00–3.00	3.00	Shoulder widening		100
	C-1073	Cariboo Highway 97	Dragon Lake Hill	0.90	Shoulder widening		100
	C-0141B	Cariboo Highway 97	Cuisson Creek	0.50	Slope stabilization		100
		Fraser Road No. 32	Various sections	5.00	Gravelling		100
		Gook Road No. 30	Ditching easement	0.50	Ditching		100
	W-0357B	Cariboo Highway 97	Various sections	2.00	Fencing		100
	E-0973	Cariboo Highway 97	Dragon Lake Hill	0.90	Street lighting		100
	C-0141C	Baezaeko Road No. 87	Mackenzie Grade	4.00	Brushing and gravelling		100
		Alec Meadow Road No. 831	Km 0.00–3.00	3.00	Brushing and gravelling		100
		Nazko Road No. 59	Various sections	3.00	Ditching		100
	W-0357C	Nazko Road No. 59	Various sections	3.00	Fencing		100
	C-0445C	Nazko Road No. 59	Camp trailer pad		Installation		100
	C-0445D	Eberding Road No. 36	Various sections	5.0	Reconstruction		100
		Cariboo Highway 97	McLeese Lake	0.3	Channelization		100
	C-0141D	McDougall Road No. 356	Various sections	3.0	Ditching		100
		Lee Road No. 353	Various sections	1.5	Gravelling		100
		Sheridan Pit			Development		100
	W-0357D	Cariboo Highway 97	McLeese Lake		Cattle underpass		100
	C-0141E	Bowron Lake Road No. 29	Various sections	5.0	Gravelling		100
	C-0445E	Barkerville Highway 26	Jack o' Clubs	1.5	Machine patching		100
	C-0865E	Wormwold Pit			Development		100
	C-0445F	Milner Road No. 886	Km 0.00–1.5	1.5	New construction–new route		100
		Camp Creek Road No. 330	Km 0.52–2.52	2.0	Reconstruction		100

Dawson Creek	C-0141F	Cariboo Highway 97	Various sections	1.0	Shoulder repair		100
		Cariboo Highway 97	Hixon Hill	0.5	Slide stabilization		100
		Pedley Pit			Sand pit development		100
		Pedley Pit			Salt shed construction		100
	W-0357F	Cariboo Highway 97	Various sections	2.0	Fencing		100
		Road No. 210	Km 0.00–2.4	2.4	Regravel		100
		Road No. 208B	Km 0.00–0.8	0.8	Gravel		100
		Patterson Road No. 204D	Km 0.0–1.6	1.6	Regravel		100
		Briar Ridge Road No. 4	Km 2.18–3.78	1.6	Regravel		100
		Powell Road No. 204B	Km 2.45–4.05	1.6	Regravel		100
		Wallis Road No. 204	Km 0.96–3.36	2.4	Regravel		100
		Blockline Road No. 200	Km 6.08–8.48	2.4	Regravel		100
		Zacharais Road No. 200	Km 10.08–10.48	0.4	Regravel		100
		Gundy Road No. 20	Km 9.67–12.87	3.2	Regravel		100
		Gundy Road No. 20	Km 5.65–8.05	2.4	Regravel		100
		Ruscheinski Road No. 192	Km 2.6–5.0	2.4	Gravel		100
		T.V. Tower Road No. 45	Km 0.0–0.8	0.8	Regravel		100
		McKellar Road No. 231	Km 10.9–12.5	1.6	Regravel		100
		Silo Road No. 206	Km 20.56–21.36	0.8	Regravel		100
		Road No. 219	Km 8.9–11.3	2.4	Regravel		100
		Lansfried Road No. 196A	Km 10.88–11.28	0.4	Regravel		100
		Road No. 217	Km 16.2–17.0	0.8	Regravel		100
		Berry Road No. 213A	Km 0.0–2.4	2.4	Regravel		100
		Torvan Sub. Road No. 346	Km 0.0–0.4	0.4	Regravel		100
		Peterson Road No. 215	Km 10.0–10.4	0.4	Regravel		100
		Old Hart Road No. 208	Km 32.66–33.46	0.8	Regravel		100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Dawson Creek —*Continued*		Road No. 225	Km 9.6–10.0	0.4	Regravel		100
		Tate Creek Road No. 17	Km 0.0–0.4	0.4	Regravel		100
		Highway 1	Km 1.13–1.53	0.4	Regravel		100
		Gagne Road No. 230	Km 37.12–40.32	3.2	Regravel		100
		Road No. 251	Km 48.0–49.6	1.6	Gravel		100
		Collins Road No. 230	Km 33.92–35.52	1.6	Regravel		100
		Road No. 228	Km 33.92–37.12	3.2	Gravel		100
		Tower Lake Road No. 14	Km 9.6–12.6	3.0	Regravel		100
		Triangle Road No. 25	Km 0.0–1.6	1.6	Regravel		100
		Johnson Road No. 232C	Km 37.12–40.32	3.2	Regravel		100
		Big Barn Road No. 24	Km 0.0–0.8	0.8	Paved		100
		Road No. 247	Km 48.0–48.8	0.8	Regravel		100
		Road No. 241	Km 44.8–48.0	3.2	Gravel		100
		Butler Road No. 251	Km 22.4–24.0	1.6	Regravel		100
		Studley Road No. 249	Km 24.0–25.6	1.6	Regravel		100
		Parkland Road No. 7	Km 17.12–17.92	0.8	Regravel		100
		Parkland Road No. 7	Km 21.12–21.92	0.8	Regravel		100
		Anderson Road No. 220	Km 32.95–34.55	1.6	Re-construct and gravel		100
		Road No. 225	Km 33.0–34.6	1.6	Regravel		100
		Borek Road No. 231	Km 31.2–32.0	0.8	Gravel		100
		Triangle Road No. 25	Km 6.72–8.32	1.6	Regravel		100
		Triangle Road No. 25	Km 8.32–9.92	1.6	Regravel		100
		Hogg's Road No. 241	Km 14.4–15.2	0.8	Regravel		100
		Mason Road No. 235	Km 19.2–20.0	0.8	Regravel		100
		Road No. 231	Km 19.2–20.8	1.6	Regravel		100
		Road No. 237	Km 19.2–20.8	1.6	Regravel		100
		Road No. 216	Km 23.8–24.6	0.8	Gravel		100

		Haugen's Road No. 229	Km 16.0–16.8	0.8	Regravel		100
		Road No. 227	Km 16.0–16.4	0.4	Regravel		100
		Kenzie Sub. Road No. 332	Km 0.0–0.8	0.8	Regravel		100
		Harper Sub. Road No. 309	Km 0.0–0.8	0.8	Regravel		100
		Imperial Access Road No. 210	Km 16.16–16.96	0.8	Regravel		100
		Washington Road No. 221	Km 15.96–19.32	3.2	Regravel		100
		Road No. 221	Km 9.6–11.2	1.6	Regravel		100
		Road No. 223	Km 33.0–36.10	3.10	Construct and gravel		100
		Road No. 221	Km 33.6–35.2	1.6	Construct		100
		Road No. 222	Km 15.27–17.67	2.4	Construct and gravel		100
		Road No. 201	Km 40.05–41.6	1.6	Construct		100
		Road No. 223	Km 31.4.–33.0	1.6	Construct		100
		Road No. 216	Km 16.6–19.0	2.4	Gravel		100
		Parr Road No. 271	Km 12.0–12.8	0.8	Construct and gravel		100
		Willow Valley Road No. 10	Km 9.7–12.9	3.2	Regravel		100
		Road No. 273	Km 24.0–24.8	0.8	Regravel		100
		Close Road No. 271	Km 24.0–24.8	0.8	Regravel		100
		Odden Road No. 273	Km 14.4–16.0	1.6	Regravel		100
		Verhoven Road No. 263	Km 16.8–17.6	0.8	Gravel		100
		Road No. 214	Km 59.84–61.44	1.6	Construct		100
		Road No. 257	Km 22.4–23.2	0.8	Regravel		100
		Sunset Prairie Road No. 9	Km 3.2–6.4	3.2	Regravel		100
		Progress Pit Road No. 253	Km 14.4–16.0	1.6	Reconstruct and regravel		100
		Gibbon Road No. 206	Km 42.46–43.26	0.8	Reconstruct and regravel		100
		Gibbon Road No. 206	Km 40.86–41.66	0.8	Regravel		100
		Bedell Road No. 206	Km 34.66–35.86	1.2	Regravel		100
		Upper Cutbank Road No. 13	Km 0.0–9.6	9.6	Regravel		100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Dawson Creek —*Continued*		Pumping Station Road No. 208	Km 33.46–34.26	0.8	Regravel		100
		Cowie Creek Road No. 27	Km 0.0–7.0	7.0	Regravel		100
		Lone Prairie Road No. 28	Km 0.0–8.0	8.0	Regravel		100
		South Moberly Road No. 30	Km 0.0–2.5	2.5	Regravel		100
		Jackfish Lake Road No. 12	Km 3.2–13.2	10.0	Regravel		100
		Northeast Development Road No. 86	Km 0.0–8.0	8.0	Regravel		100
		Weaver Road No. 18A	Km 0.0–2.0	2.0	Gravel (taken over)		100
		Heritage Highway 52	Km 128.82–150.82	22.0	Regravel		100
		Heritage Highway 52	Km 59.2–76.80	17.6	Regravel		100
		Heritage Highway 52	Km 201.29–225.29	24.0	Regravel		100
		Heritage Highway 52	Km 188.29–225.29	37.0	Regravel		100
Fort St. John	C-0872	Highway 29	Deep Creek at km 8.1	1.0	Reconstruction—realignment to eliminate bridge, installation of sheet piling for fill stabilization, completion of fill placement.		60
	C-0873	Highway 97 (Arterial 682R)	At junction with 100 Avenue in Fort St. John	0.5	Reconstruction—widening of highway and upgrading of intersection		100
	C-4191	Miscellaneous District roads.	Various roads throughout the District	45	Reconstruction—regravelled existing roads.		100
	C-4484	Liard Highway	Km 0–26.0	26	Reconstruction—regravelling and stockpiling 19 mm crushed gravel.		100
	C-0874(A)	Road No. 119 (Old Hope Road)	Km 0.0–3.2	3.2	Reconstruction—upgrade to prepare for paving.		100

	C-0874(C)	Road No. 271	Road No. 242 to Highway 97	2.0	Reconstruction—upgrade to prepare for paving.		100
	C-0874(D)	Road No. 242	Road No. 269 to Road No. 271	1.6	Reconstruction—upgrade to prepare for paving.		100
	C-0874(E)	Road No. 269	Highway 97 to Road 244	2.2	Reconstruction—upgrade to prepare for paving.		100
	C-0874(G)	Road No. 277 (Golf Course Road)	Intersection Highway 29 and Highwa · 97 to Golf Course Road	2.6	Reconstruction—upgrade to prepare for paving.		100
	C-0874(H)	Road No. 260	Road No. 101 to Road No. 259	3.2	Reconstruction—upgrade to prepare for paving.		100
	C-0874(I)	Road No. 121 (Old Montney Road)	Road No. 254 to Road No. 114	2.8	Reconstruction—upgrade to prepare for paving.		100
	C-0874(L)	Road No. 259	Road No. 260 to Road No. 137	4.8	Reconstruction—upgrade to prepare for paving.		100
	C-0874(M)	Road No. 184 (Siphon Creek Road)	Road No. 250 to Road No. 252	3.2	Reconstruction—upgrading		100
	C-0874(O)	Road No. 105 and Road No. 106	Road No. 107 south to Tank Farm Turnoff	4.8	Reconstruction—upgrading		100
	C-0874(P)	Road No. 271 (Beatton Park Road)	Highway 97 north to Road No. 246	4.7	Reconstruction—upgrading		100
	C-0874(R)	Road No. 137 (Milligan Creek Road)	Km 36.7–44.7	8.0	Reconstruction—upgrading		100
	C-0874(S)	Road No. 151 (Beatton River Road)	Km 38.0–67.0 (various locations)	6.0	Reconstruction—drainage improvements and reconstruct fill areas.		100
	C-0874(W)	Road No. 118 (Beryl Prairie Road)	Km 8.6–13.4	4.8	Reconstruction—upgrading		100
	C-0874(Y)	Road No. 510 (Clarke Lake Road)	Km 7.0–15.0	8.0	Reconstruction—upgrading		100
	C-1055(A)	Road No. 148 (Old Fort Road)	Highway 97 South to Road No. 240	3.2	Prepare for paving—base gravelling.		100
	C-1055(B)	Road No. 242	Road No. 269 to Road No. 271	1.6	Prepare for paving-base gravelling		100
	C-1055(C)	Road No. 271	Road No. 242–Highway 97	2.0	Prepare for paving-base gravelling		100
	C-1055(D)	Road No. 277 (Golf Course Road)	Intersection Highway 29 and Highway 97 to Golf Course Access	2.6	Prepare for paving-base gravelling		100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Fort St. John —*Continued*	C-1055(E)	Road No. 119 (Old Hope Road)	Km 0.0–3.2	3.2	Prepare for paving—base gravelling		100
	C-1055(F)	Road No. 269	Highway 97 to Road No. 244	2.2	Prepare for paving—base gravelling		100
	C-1055(G)	Road No. 121 (Old Montney Road)	Road No. 101 to Road No. 246	2.0	Prepare for paving—base gravelling		100
	C-1055(J)	Road No. 101	Road No. 260 to Road No. 264	6.4	Reconstruction—upgrade to prepare for paving.		100
	C-1055(M)	Road No. 114	Road No. 101 to Road No. 275	9.7	Reconstruction—upgrade to prepare for paving.		100
	C-1090(A)	Road No. 101	Road No. 260 to Road No. 264	6.4	Prepare for paving—base gravelling		65
	C-1090(B)	Road No. 260	Road No. 101 to Road No. 259	3.2	Prepare for paving—base gravelling		65
	C-1090(C)	Road No. 259	Road No. 260 to Road No. 137	4.8	Prepare for paving—base gravelling		65
	C-1090(D)	Road No. 114	Road No. 101 to Road No. 275	9.7	Prepare for paving—base gravelling		65
	C-1090(F)	Road No. 121 (Old Montney Road)	Road No. 254 to Road No. 114	2.8	Prepare for paving—base gravelling		65
	C-1090	Roads No. 101, 114, 121, 259, 260	Wilde Pit (P4468A)	—	Development work to facilitate Projects S-1120 and Project S-1049—construction of temporary access road and bridge, pit preparation, stockpiling of surfacing aggregate, paving aggregate and shouldering aggregate.		90
Vanderhoof	C-0445	Lily Lake Road	Km 16.50–18.50	2.00	Reconstruct, realign and gravel	June/81	100
		Sob Lake Road	Km 6.32–7.12	0.80	Reconstruct, realign and gravel	Aug./81	90
	C-0553	New Nechako Bridge (approaches)	Km 0.00–7.50	7.5	New construction	Aug./80	80
	C-0876	Lakeshore Drive	Km 0.00–1.60	1.60	Gravel and pave	Aug./80	100

	C-3039	Tachie Road		N/A	Crush rock and gravel	Sept./81	3
	C-3332	Stella Road	Km 1.00–6.63 (east end)	5.63	Major ditching and gravelling	Sept./81	25
	C-4497	Germansen Landing Road	Km 24.0–27.0 and 30.0–32.6	5.60	Reconstruction, realign and gravel	July/81	95
	W-0360	Shedule II Highways Fencing	Various locations	13.58	Construct barbed wire fences	July/81	100
	N-0433	Guardrail					
	C-4496	Kenney Dam Road	Km 7.55–19.3	11.75	Reconstruct, gravel and pave	Aug./81	100
	C-4496	Stoney Creek Road	Km 0.00–160	185	Reconstruct, gravel and pave	May/80	55
McBride	C-0877	Mount Robson Road No. 523	Km 0.00–2.10	2.10	Upgrade road for paving	May/80 May	100 100
	C-0877	Hargreaves Road No. 522	Km 0.00–0.74	0.74	Upgraded road for paving	May	100
	C-0878	Blackman Road No. 575	Km 4.81–10.34	5.53	Gravelled with pit run	June	100
	C-0879	Mountain View Road No. 544	Km 11.60–14.40	2.80	Realignment and construction	July	100
	C-0880	Miscellaneous	Various roads	Various	Gravel with pit run	July	100
	C-1071	Terry Fox Mountain viewpoints			Constructed 2 rest areas and parking lots	July	100
	C-4237	Eddy Road No. 552	Km 7.21–7.61	0.40	Constructed multiplate and approaches	Aug.	100
	N-1068	Highway 16—Guardrail, Moose Lake	Various locations	1.61	Erected guardrail at C.N.R. line relocation.	Aug.	100
Williams Lake	W-0361	Schedule II Fencing	Various locations	5.92	Constructed new fence	Aug.	100
		No. 20 Chilcotin–Bella Coola	Anahim's Flat I.R. No. 1	9.5	Reconstruction—widen and realign	May/81	70
		No. 90 Cedar Creek	Km 0–4.3	4.3	Widen, gravel—paving preparation	June/81	100
		No. 105 Keithley Creek	Km 0.6–1.8	1.2	Reconstruction—widen and realign	June/81	100
		No. 115 Likely	Km 20.4–22.0	1.6	Reconstruction—grade improvement	June/81	100
		No. 115 Likely	Km 60.0–64.5	4.5	Reconstruction—widen and realign	Aug./81	100
		No. 137 Dog Creek	Km 12.4–22.4	10.0	Major gravelling—paving preparation	July/81	100
		No. 137 Dog Creek	Km 22.4–24.0	1.6	Reconstruction—widen	July/81	100
		No. 323 Chimney Valley	Km 0–5.4	5.4	Major gravelling—paving preparation	July/81	100
		No. 392 Redstone–Chezacut	Km 20.0–44.0	24.0	Widen, realign and gravel	Aug./81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work, State Whether New Construction or Reconstruction. If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note.	Date Commenced	Percentage of Work Completed at March 31, 1982
Williams Lake *—Continued*		No. 419 Horsefly	Km 26.7–29.2	2.5	Reconstruction—widen and realign	Sept./81	90
		No. 610 Chimney Lake	Km 0–3.2	3.2	Major gravelling—paving preparation	July/81	100
		No. 1121 Dean River	Km 16.1–20.9	4.8	Reconstruction—widen and realign	July/81	100
		Miscellaneous roads	Williams Lake area	4.5	Major gravelling—paving preparation	July/81	100
		Miscellaneous roads	Likely area	4.0	Widen and gravel—paving preparation	June/81	100
		Miscellaneous roads	Horsefly area	5.0	Widen and gravel—paving preparation	June/81	100
REGION 5							
Prince Rupert	C-0174	Cassiar Highway 37 Stewart–Meziadin Road No. 33A	Surprise Creek to Nass River	27	Reconstruction, widening grade revisions	June/81	100
	C-0886	Towhill Road No. 51	Chown River Bridge		Slide repair		100
	C-0885	Cassiar Highway 37	Meziadin Junction—North	2	Reconstruction		100
	N-0390	Cassiar Highway 37 N.T.P.H No. 16 QCC–Massett Road No. 33	Various locations		Guardrail placement, 69 mm		100
Terrace	C-0176	Old Lakelse Lake Road No. 53	Km 3.3–12.0	8.7	Reconstruct, improving vertical and horizontal alignment and widening.	July	80
	C-0391	Guardrail	Yellowhead Highway 16	857 m	Installation of 27-inch no-post guardrail	July	100
	C-0807	Greenville Road	Nass Valley; East of Greenville	6.5	Clearing and grubbing, building access road	April	90
	C-0148	Sundry locations	Minor betterments	—	Drainage improvements, road base and surface repair, landscaping.	Spring	100
Dease Lake	C-0178	Cassiar Highway 37	Ditching, gravelling, drainage. Improvements various locations Tanzilla Bridge to 40 Mile Flat	—	Reconstruction—horizontal and vertical realignments.	June/81	100

	C-0887	Cassiar Highway 37	Graded aggregate, seal preparation Tanzilla Bridge to Garbage Dump Road—Dease Lake streets. Pine Tree Lake to Boya Lake Park	16.96 75.75	Reconstruction—widening base, strengthening, drainage improvements.	June/81	100
	C-0888	Atlin Highway	Various locations on Atlin Highway	—	Widen, ditching and base strengthening	Aug./81	100
Smithers	C-0497	Babine Lake Road No. 163	Km 50–56	6	Reconstruction—widening with horizontal and vertical alignment revisions. Gravelling.	May/81	90
	C-0189	Highway 37, Cassiar	Km 21.5–23.5	2	Re-cut unstable slopes	Oct./81	60
Burns Lake	R-C0889	No. 620R—Houston Arterial	Nadina Avenue and Butler Avenue. Turnslots in Houston	1.0 Lane	Reconstruction—constructing and paving turnslots.	June/81	100
	R-C0890	No. 163 Hamlet Frontage Road	Paving road, Topley	0.6 Lane	Reconstruction—paving frontage roads	June/81	100
	R-C0891	No. 118 Topley Landing Road	Approach to North Side of Fulton Bridge, Topley Landing	0.3 Lane	Reconstruction—realignment of Highway for safety reasons.	July/81	100
	R-C0892	No. 206 Walcott Extension	From Hydro Substation in District Lot 713 to centre point of District Lot 714	1	New construction. New road along old trail.	June/81	40
	Y-C0204	No. 620R Houston Arterial	Nadina Avenue to Morice Lake Road, Municipality of Houston	3.1	Reconstruction of shoulder widening along Highway 16.	June/81	100
	R-N0393	No. 16 Yellowhead	9 km east of Burns Lake	0.5	Installation of concrete guardrail, replacing post and beam	July/81	100
	R-W0364	No. 16 Yellowhead	Various locations along Highway	7.7	New construction—Schedule II Fencing	July/81	100
	R-C0151A	No. 43 East Francois Road	Through District Lot 5700	1.0	Reconstruction—new route	July/81	100
	R-C0151B	No. 21 Colleymount Road	Rat Creek to Trout Creek	3.0	Reconstruction—regravelling	Aug./81	100

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Burns Lake —*Continued*	R-C0151C	No. 114 Beach Road	Lot 7, Plan 4435, District Lot 1891, R5, CD	0.1	Reconstruction—realignment	July/81	100
	R-C0151D	No. 161 Bye Road	District Lot 2621, Uplands Trailer Court	1.0	Reconstruction—gravelling	June/81	100
	R-C0151E	No. 70 Jarman Road	District Lot 3553—North of Perow	1.0	Reconstruction—gravelling	June/81	100
	R-C0151F	No. 152 Sunset Lake Road	Highway 16 to C.N.R. Tracks	0.4	Reconstruction—ditching, gravelling	June/81	40
	R-C0151H	No. 131 Wakefield and No. 83 Summit Lake	Section 29, TPG and District Lot 1162	3.7	Reconstruction—R/W fencing as agreements	June/81	100
	R-C0151K	No. 59 Keefes Landing	Various locations from Southbank to Barkers Meadows Pit	4.0	Reconstruction—ditch clean and construction.	June/81	100
	R-C0151L	Area C Southbank	Various roads		Reconstruction—machine paving	June/81	100
REGION 6 Nanaimo	C-0900	Akenhead Road	Reconstruct and pave	0.90	Reconstruct and pave	Aug./81	100
	C-0901	Yellowpoint Road	Recap pave	1.20	Recap pave	July/81	100
	C-0902	Riverbottom Road	Reconstruct	1.30	Reconstruct	Aug./81	100
	C-0903	Chapman Road	Reconstruct	0.60	Reconstruct	July/81	100
	C-0904	South Road	Reconstruct and pave	0.90	Reconstruct and pave	Sept./81	100
	C-0905	Jamison Road	Reconstruct and pave	1.25	Reconstruct and pave	June/81	100
	C-0906	Mountain Road	Reconstruct	2.00	Reconstruct	Oct./81	100
	C-0907	Old Cowichan Lake Road	Construct connector	0.60	Connector to Cowichan Road	June/81	100
	C-0908	Trans-Canada Highway	Four laning	0.20	Coronation Avenue to York	July/81	100
	C-0909	Crofton Road	Recap pave	1.50	Recap pave	Aug./81	100
	C-0152A	Allsop Road	Reconstruct and pave	0.80	Reconstruct and pave	Aug./81	100
	C-0152B	Pylades Road	Reconstruct and pave	0.90	Reconstruct and pave	July/81	100

Saanich	C-0152E	Doupe Road	Reconstruct	0.50	Reconstruct	Sept./81	100
	C-0152L	Noowick Road	Reconstruct and pave	0.75	Reconstruct and pave	Aug./81	100
	C-01520	Ricardo Road	Reconstruct and pave	0.50	Reconstruct and pave	May/81	100
	C-0192	Helmcken Road	At Victoria West General Hospital	0.25	Reconstruct and pave, grade	April/81	100
	C-582	Beaver Point and Fulford Ganges	Beaver Point-Fulford Ganges Intersection	0.10	Pave intersection	Aug./81	100
	C-0911	Fulford Ganges Road	At Ganges Townsite	0.30	Reconstruct intersection—realignment	Sept./81	100
	C-0913	Trans-Canada Highway	At Millstream intersection	0.30	Lengthen left turn facility	Mar./82	100
	C-0914	Sooke Road	Intersection and Glen Lake Road	0.30	Realignment and Channelization	July/81	100
	C-0547	View Royal—Miscellaneous roads	View Royal area roads	7.20	Repave area streets	Sept./81	100
	C-0915	Mount Belcher Heights Road	Charlesworth to Wilkie Way	0.80	Repave	Sept./81	100
	C-1010	Pat Bay Highway	Pat Bay Highway at Royal Oak Drive	0.10	Construct new bus stops	July/81	100
	N-0396	Trans-Canada Highway	At Goldstream Park	0.30	Guardrail replacement	Oct./81	100
Port Alberni	C-0542	No. 1 Beaver Creek Road	Deer Creek Bridge approaches	0.5	Reconstruct (new diversion)	April/81	90
	C-0667	Highway 4, Alberni—Tofino Highway	Kerr Creek Bridge to Hynds Creek Bridge	1.6	Construct 2 extra lanes	May/81	100
	C-0899	No. 544 Drew Road	Sunrise Drive to 0.9 km South thereof	0.9	Minor construction, pave	June/81	100
	N-0397	Guardrail installation	Various locations	780 m	Place[1] 690 mm no-post	June/81	100
	C-1021	Highway 19 and Lee Road	Parksville area	N/A	Left-turn slot	Feb./82	100
	C-0154F	547R Tofino Arterial	Tofino	0.3	Construct and blast drainage ditch	June/81	100
	C-0154K	993 Juniper Road	Parksville area	0.5	Pave	July/81	100
	C-0154L	2136 Outrigger Road	Parksville area	0.4	Pave	July/81	100
	J-6307	490 Errington Road	Errington	0.1	Reconstruct, pave	June/81	100
	J-6309	672 Lantzville Road	Lantzville	5.1	Prepare for paving	June 81	100
	J-6313	356 Plummer Road	Parksville area	0.4	Asphalt overlay	July/81	100
	J-6315	677 Yambury Road	Parksville area	0.9	Ditch construction, place rip-rap	July/81	100
	X-9104A	Highway 4 and Port Alberni Highway	Port Alberni	N/A	Construct lamp standards protection	Feb./81	100

Statement as to Major Highway Work (Day Labour Only) Completed or in Progress During Fiscal Year 1981/82—*Continued*

Region and Highway District	Project Number (if any)	Name of Road	Extent of Work (Location of Work or Initial and Terminal Points)	Distance of Work (km)	Description of Work. State Whether New Construction or Reconstruction If the Latter, State Also Whether New Diversion, Widening, Realignment, Grade Revision, etc. See Note	Date Commenced	Percentage of Work Completed at March 31, 1982
Port Alberni —*Continued*	X-9104B	No. 13 Compton Road	Port Alberni	0.4	Construct and pave foot-path, Junior High School	June/81	100
Courtenay	C-0155A	Menzies Road and Wynn Road	Courtenay Foreman area		New construction		
	C-0155A	Cessford and Back Road	Courtenay Foreman Area		Widening shoulders and regravelling		
	C-0155A	Comox Lake Road, Comox Hill, Little River Road and Bates Road	Courtenay Foreman Area Total	15.0		June/81	100
	C-0155B	York Road	Campbell River Foreman Area	4.5	Widening, ditching and gravelling	June/81	100
	C-0155D	Holberg Road	Port Hardy Foreman Area		Gradall brushing	June/81	100
	C-0155G	Hyacinth Bay	Quadra Island Foreman Area	0.2	Reconstruct a portion of road with culvert and a large fill	June/81	100
	C-0155J	Swan Road	Denman Island Foreman Area	0.8	Paving road	June/81	100
		Denman Road	Denman Island Foreman Area	0.3	Reconstruction of existing hill	Nov./81	100
	C-0155H	Miscellaneous Roads on Malcolm Island	Sointula Foreman Area	6.0	Upgrading of roads by gravelling	Aug./81	100
	C-0155M	Miscellaneous Roads in Courtenay Area	Courtenay Foreman Area	2.4	Widening and reconstruction	June/81	100
	C-0917	Island Highway 19	Courtenay and Campbell River Foreman Area	17.51	Completion of ditching shoulders, driveways, pole mover etc.	May/81	100
	C-0545	Condensory Road	Courtenay Foreman Area	1.6	New construction	July/81	100
	C-0918	Highway 19 and 28	Campbell River Foreman Area	0.4	Reconstruction of intersection and paving	Sept./81	90

	C-0919	Quadra Island miscellaneous roads	Quadra Island Foreman Area	14.0	Seal coating	July/81	100
	C-0920	Miscellaneous Roads	Hornby Island and Foreman Area	7.0	Seal coating	July/81	100
	C-0921	Miscellaneous Roads Courtenay	Courtenay Foreman Area	5.9	Seal coating	July/81	100
	C-0923	Campbell Way	Port Hardy Foreman Area	1.2	Shoulder widening, ditch, construction and storm drainage.		

Statement Showing Distances of Provincial Highways and Classified Highways

By Class

(Classified in Bold Type)

In Kilometres

Region & Highway District	Provincial and Classified	Ministry of Transportation & Highways							Ministry of Energy, Mines and Natural Resources	
		Trunk Highways	Main Highways	Other Roads		Total Distance Open	Distance Not Open	Trails	Roads	Trails
				Collector	Minor					
REGION 1										
11. North Vancouver.	Provincial	8.22	75.10	99.94	126.00	309.26	14.23	.....	.....	.....
	Classified	**51.39**	**70.90**	**8.44**	**5.35**	**136.08**	.....	.....	.....	.....
12. Gibsons	Provincial	.....	121.48	152.23	305.89	579.60	185.31	27.73	.....	.....
	Classified	.....	**18.95**	**.24**	**6.40**	**25.59**	.....	.....	.....	.....
14. New Westminster	Provincial	1.23	4.73	32.23	35.66	73.85	3.46	.....	.....	.....
	Classified	**279.83**	**148.23**	**98.25**	**5.69**	**532.00**	**5.82**	.....	.....	.....
15. Chilliwack **..	Provincial	276.70	4.83	149.07	412.81	843.41	45.49	74.82	20.11	139.02
	Classified	**125.17**	**65.63**	**66.80**	**1.53**	**259.13**	.....	.....	.....	.....
Regional Totals .	Provincial	286.15	206.14	433.47	880.36	1806.12	248.49	102.55	20.11	139.02
	Classified	**456.39**	**303.71**	**173.73**	**18.97**	**952.80**	**5.82**	.....	.....	.....
REGION 2										
21. Kamloops	Provincial	310.00	138.60	392.40	1063.00	1904.00	82.50	204.40	.....	.....
	Classified	**51.00**	.....	.....	.....	**51.00**	.....	.....	.....	.....
22. Salmon Arm ...	Provincial	194.15	.....	453.91	566.36	1214.42	125.43	.....	22.54	76.97
	Classified	**23.39**	.....	**5.64**	**21.88**	**50.91**	.....	.....	.....	.....
23. Vernon	Provincial	135.25	8.85	415.75	459.69	1019.54	76.36	33.60	57.92	67.57
	Classified	**52.56**	.....	**24.48**	.....	**77.04**	.....	.....	.....	.....
24. Penticton	Provincial	297.45	.....	394.67	699.66	1391.78	55.24	111.98	29.36	149.06
	Classified	**36.16**	.....	**18.20**	.....	**54.36**	.....	.....	.....	.....
25. Merritt	Provincial	160.57	90.08	645.36	313.93	1209.94	18.75	.....	12.39	8.05
	Classified	**5.59**	**7.49**	.....	.....	**13.08**	.....	.....	.....	.....
26. Lillooet	Provincial	75.80	175.10	309.64	425.86	986.40	109.90	.....	.....	.....
	Classified	**6.60**	**.70**	**9.60**	.....	**16.90**	.....	.....	.....	.....
27. 100 Mile House	Provincial	140.87	63.43	561.90	1169.70	1935.90	152.23	153.92	9.60	117.12
	Classified	**4.43**	.....	.....	**2.62**	**7.05**	.....	.....	.....	.....
29. Kelowna	Provincial	60.60	39.31	132.80	760.95	993.66	243.95	.....	.....	.....
	Classified	**28.79**	.....	**13.99**	.....	**42.78**	.....	.....	.....	.....
Regional Totals .	Provincial	1374.69	515.37	3306.43	5459.15	10655.64	864.36	503.90	131.81	418.77
	Classified	**208.52**	**8.19**	**71.91**	**24.50**	**313.12**	.....	.....	.....	.....
REGION 3										
31. Nelson	Provincial	165.10	41.10	135.10	370.13	711.43	36.84	.....	145.16	20.12
	Classified	**9.38**	.....	**.58**	.....	**9.96**	.....	.....	.....	.....
32. Rossland	Provincial	155.62	15.83	58.02	290.11	519.58	88.74	.....	5.55	.....
	Classified	**34.40**	**3.91**	**1.29**	.....	**39.60**	**2.02**	.....	.....	.....
33. Grand Forks ...	Provincial	133.73	96.01	167.02	615.13	1011.89	46.74	.....	19.55	.....
	Classified	**15.39**	.....	**1.98**	.....	**17.37**	.....	.....	.....	.....
34. New Denver ...	Provincial	162.60	148.40	73.30	312.70	697.00	58.14	.....	279.52	6.72
	Classified	**4.30**	**7.10**	.....	.....	**11.40**	.....	.....	.....	.....
35. Cranbrook	Provincial	217.00	.....	218.80	573.80	1009.60	62.60	.....	19.30	.....
	Classified	**15.60**	.....	**4.00**	.....	**19.60**	.....	.....	.....	.....
36. Fernie	Provincial	116.67	21.45	86.20	396.30	620.62	312.84	.....	.....	.....
	Classified	**30.51**	.....	**14.66**	**1.13**	**46.30**	.....	.....	.....	.....
37. Golden	Provincial	260.90	.....	9.50	543.10	813.50	93.40	.....	274.10	74.00
	Classified	**8.80**	.....	**2.70**	.....	**11.50**	**2.50**	.....	.....	.....
38. Revelstoke ...	Provincial	71.32	110.76	13.35	245.21	440.64	28.43	.80	15.93	83.85
	Classified	**8.99**	**1.39**	**16.80**	.....	**27.18**	.....	.....	.....	.....
39. Creston	Provincial	184.75	13.52	246.93	94.30	539.50	25.21	.....	.....	.....
	Classified	**5.36**	.....	**2.03**	.....	**7.39**	.....	.....	.....	.....
Regional Totals .	Provincial	1467.69	447.07	1008.22	3440.78	6363.76	752.94	.80	759.11	184.69
	Classified	**132.73**	**12.40**	**44.04**	**1.13**	**190.30**	**4.52**	.....	.....	.....

** Note: Hope District absorbed by Chilliwack District April 1, 1981

Statement Showing Distances of Provincial Highways and Classified Highways

By Surface Type

(Classified in Bold Type)

In Kilometres

Region & Highway District	Provincial and Classified	Ministry of Transportation & Highways							Ministry of Energy, Mines and Natural Resources	
		Trunk Highways	Main Highways	Other Roads		Total Distance Open	Distance Not Open	Trails	Roads	Trails
				Collector	Minor					
REGION 4										
41. Prince George	Provincial	418.98	45.58	153.21	814.96	1632.73	282.15	.....	.....	.....
	Classified	**57.88**	**20.44**	.....	.....	**78.32**	.....	.....	.....	.....
42. Quesnel	Provincial	173.41	85.29	550.63	1340.42	2149.75	69.97	93.86	288.11	535.90
	Classified	**7.72**	.....	**7.28**	.....	**15.00**	.....	.....	.....	.....
43. Dawson Creek .	Provincial	341.16	51.20	1705.70	389.98	2487.04	2004.37	.....	.....	.....
	Classified	**36.12**	**68.00**	**1.71**	.....	**105.83**	.....	.....	.....	.....
44. Fort St. John	Provincial	69.60	124.22	1514.60	735.11	2443.53	1281.10	.....	.....	.....
	Classified	**7.70**	**22.63**	**33.88**	**12.66**	**76.87**	.....	.....	.....	.....
45. Vanderhoof ...	Provincial	121.07	60.48	481.55	727.28	1390.38	350.77	297.85	522.92	233.45
	Classified	**26.73**	**6.35**	**2.89**	.....	**35.97**	.....	.....	.....	.....
46. McBride	Provincial	356.17	.....	.....	325.46	681.63	72.93	22.53	.....	.....
	Classified	**1.19**	.....	**2.32**	.....	**3.51**	.....	.....	.....	.....
47. Williams Lake	Provincial	64.52	466.88	6.39	2476.04	3013.83	103.59	596.89	90.67	268.59
	Classified	**3.57**	**1.88**	**3.98**	.....	**9.43**	.....	.....	.....	.....
Regional Totals .	Provincial	1544.91	833.65	4412.08	6808.25	13598.89	4164.88	1006.13	901.70	1037.94
	Classified	**140.91**	**119.30**	**52.06**	**12.66**	**324.93**	.....	.....	.....	.....
REGION 5										
51. Prince Rupert	Provincial	15.81	304.08	.....	150.20	470.09	109.09	54.48	53.27	.....
	Classified	**42.05**	**50.82**	**2.30**	.....	**95.17**	.....	.....	.....	.....
52. Terrace	Provincial	136.54	51.11	100.06	162.49	450.20	137.62	133.31	.....	57.49
	Classified	**5.95**	**6.60**	**6.30**	.....	**18.85**	.....	.....	.....	.....
53. Dease Lake ...	Provincial	.....	566.21	45.96	258.97	871.14	.50	1281.90	.....	.....
	Classified	.....	.....	.....	.....	.....	.....	.....	.....	.....
54. Smithers	Provincial	257.29	.....	169.22	588.31	1014.82	131.90	611.42	28.48	435.23
	Classified	**13.73**	.....	**.60**	**7.30**	**21.63**	.....	.....	.....	.....
55. Burns Lake ...	Provincial	113.40	22.20	422.40	430.60	988.60	83.40	.....	.....	137.60
	Classified	**35.30**	**.70**	**3.20**	.....	**39.20**	.....	.....	.....	.....
Regional Totals .	Provincial	523.04	943.60	737.64	1590.57	3794.85	462.51	2081.11	81.75	630.32
	Classified	**97.03**	**58.12**	**12.40**	**7.30**	**174.85**	.....	.....	.....	.....
REGION 6										
61. Nanaimo	Provincial	92.15	36.00	353.65	674.90	1156.70	102.58	18.40	28.32	22.40
	Classified	**48.34**	**9.33**	**6.84**	**25.00**	**89.51**	.....	.....	.....	.....
62. Saanich	Provincial	23.24	71.00	242.46	781.47	1118.17	127.17	.....	.....	69.26
	Classified	**37.35**	**34.98**	**34.30**	**1.11**	**107.74**	.....	.....	.....	.....
63. Port Alberni .	Provincial	174.10	43.50	35.30	651.40	904.30	412.60	29.90	7.20	.....
	Classified	**16.31**	**10.60**	.....	.....	**26.91**	.....	.....	.....	.....
64. Courtenay	Provincial	287.10	154.30	43.40	912.00	1396.80	166.37	376.80	.....	106.10
	Classified	**31.69**	**32.65**	.....	**32.00**	**96.34**	.....	.....	.....	.....
Regional Totals .	Provincial	576.59	304.80	674.81	3019.77	4575.97	808.72	425.10	35.52	197.76
	Classified	**133.69**	**87.56**	**41.14**	**58.11**	**320.50**	.....	.....	.....	.....
Totals	Provincial	5773.07	3250.63	10572.65	21198.88	40795.23	7301.90	4119.59	1930.00	2608.50
	Classified	**1169.27**	**589.28**	**395.28**	**122.67**	**2276.50**	**10.34**	.....	.....	.....
Grand Totals ...	Provincial & Classified	6942.34	3839.91	10967.93	21321.55	43071.73	7312.24	4119.59	1930.00	2608.50

Statement Showing Distances of Provincial Highways and Classified Highways

By Surface Type

(Classified in Bold Type)

In Kilometres

Region & Highway District	Provincial and Classified	A Portland Cement Concrete	A Bituminous Plantmix	B Bituminous Road Mix & Soil Cement	C Gravelled	D Not Gravelled	Total Miles Open	Right-of-Way Cleared	Right-of-Way Established	Total Distance Not Open
REGION 1										
11. North Vancouver	Provincial	2.00	126.24	56.14	121.56	3.32	309.26	6.58	7.65	14.23
	Classified	.....	**131.63**	.....	**4.45**	.....	**136.08**	.....	.....	.....
13. Gibsons	Provincial	.....	277.57	103.97	179.81	18.25	579.60	19.68	165.63	185.31
	Classified	.....	**24.71**	**.88**	.....	.....	**25.59**	.....	.....	.....
14. New Westminster	Provincial	2.67	50.15	12.75	8.07	.21	73.85	3.12	.34	3.46
	Classified	**1.49**	**511.26**	**16.54**	**2.71**	.....	**532.00**	**2.18**	**3.64**	**5.82**
15. Chilliwack .**	Provincial	.....	467.88	69.94	232.80	72.79	843.41	33.28	12.21	45.49
	Classified	**8.78**	**219.11**	**29.71**	**1.53**	.....	**259.13**	.....	.....	.....
Regional Totals .	Provincial	4.67	921.84	242.80	542.24	94.57	1806.12	62.66	185.83	248.49
	Classified	**10.27**	**886.71**	**47.13**	**8.69**	.....	**952.80**	**2.18**	**3.64**	**5.82**
REGION 2										
21. Kamloops	Provincial	.....	330.60	321.30	1022.00	230.10	1904.00	79.20	8.30	87.50
	Classified	**51.00**	.....	.....	.....	.....	**51.00**	.....	.....	.....
22. Salmon Arm ...	Provincial	.....	360.18	166.26	551.10	136.88	1214.42	77.96	47.47	125.43
	Classified	.....	**50.91**	.....	.....	.....	**50.91**	.....	.....	.....
23. Vernon	Provincial	.....	246.65	213.98	463.77	95.14	1019.54	.....	76.36	76.36
	Classified	.....	**65.21**	**11.83**	.....	.....	**77.04**	.....	.....	.....
24. Penticton	Provincial	.....	360.98	409.02	436.88	184.90	1391.78	.....	55.24	55.24
	Classified	.....	**49.06**	**5.30**	.....	.....	**54.36**	.....	.....	.....
25. Merritt	Provincial	.....	198.38	252.28	463.46	295.82	1209.94	13.97	4.78	18.75
	Classified	.....	**9.10**	**3.98**	.....	.....	**13.08**	.....	.....	.....
26. Lillooet	Provincial	.....	102.20	181.80	679.60	22.80	986.40	5.20	104.70	109.90
	Classified	.....	**15.90**	**1.00**	.....	.....	**16.90**	.....	.....	.....
27. 100 Mile House	Provincial	.....	295.19	139.84	1212.90	287.97	1935.90	115.90	36.43	152.33
	Classified	.....	**6.51**	**.54**	.....	.....	**7.05**	.....	.....	.....
29. Kelowna	Provincial	.....	518.87	153.04	283.64	38.11	993.66	212.49	31.46	243.95
	Classified	.....	**34.52**	**8.26**	.....	.....	**42.78**	.....	.....	.....
Regional Totals .	Provincial	.....	2413.05	1837.52	5113.35	1291.72	10655.64	504.72	359.64	864.36
	Classified	**51.00**	**231.21**	**30.91**	.....	.....	**313.12**	.....	.....	.....
REGION 3										
31. Nelson	Provincial	.30	252.86	120.70	276.28	61.29	711.43	1.60	35.24	36.84
	Classified	**.30**	**9.66**	.....	.....	.....	**9.96**	.....	.....	.....
32. Rossland	Provincial	.42	242.04	114.70	134.85	27.57	519.58	18.98	69.76	88.74
	Classified	.....	**39.60**	.....	.....	.....	**39.60**	.....	**2.02**	**2.02**
33. Grand Forks ..	Provincial	.....	160.30	304.18	333.56	213.85	1011.89	19.34	27.40	46.74
	Classified	.....	**17.37**	.....	.....	.....	**17.37**	.....	.....	.....
34. New Denver ...	Provincial	.....	104.90	250.80	239.40	101.90	697.00	3.36	54.78	58.14
	Classified	.....	**3.50**	**7.90**	.....	.....	**11.40**	.....	.....	.....
35. Cranbrook	Provincial	.....	264.40	110.50	399.20	235.50	1009.60	13.80	48.80	62.60
	Classified	.....	**15.60**	**4.00**	.....	.....	**19.60**	.....	.....	.....
36. Fernie	Provincial	.....	148.55	125.75	209.63	136.69	620.62	72.92	239.92	312.84
	Classified	.....	**45.17**	.....	**1.13**	.....	**46.30**	.....	.....	.....
37. Golden	Provincial	.....	313.50	141.30	321.80	36.90	813.50	73.00	20.40	93.40
	Classified	.....	**11.50**	.....	.....	.....	**11.50**	.....	**2.50**	**2.50**
38. Revelstoke ...	Provincial	.....	81.24	223.19	100.38	35.83	440.64	26.33	2.10	28.43
	Classified	.....	**20.42**	**6.76**	.....	.....	**27.18**	.....	.....	.....
39. Creston	Provincial	1.08	223.58	120.77	146.51	47.56	539.50	2.32	22.89	25.21
	Classified	.....	**7.39**	.....	.....	.....	**7.39**	.....	.....	.....
Regional Totals .	**Provincial**	**1.80**	**1791.37**	**1511.89**	**2161.61**	**1897.09**	**6363.76**	**231.65**	**521.29**	**752.94**
	Classified	**.30**	**170.21**	**18.66**	**1.13**	.....	**190.30**	.....	**4.52**	**4.52**

** Note: Hope District absorbed by Chilliwack District April 1, 1981

Statement Showing Distances of Provincial Highways and Classified Highways

By Class

(Classified in Bold Type)

In Kilometres

Region & Highway District	Provincial and Classified	A	A	B	C	D				
		Portland Cement Concrete	Bituminous Pavement	Bituminous Road Mix & Soil Cement	Gravelled	Not Gravelled	Total Miles Open	Right of Way Cleared	Right of Way Established	Total Distance Not Open
REGION 4										
41. Prince George	Provincial	.....	475.17	113.07	617.60	226.89	1432.73	150.76	131.39	282.15
	Classified	.....	**68.74**	.....	**9.58**	.....	**78.32**	.....	.....	.....
42. Quesnel	Provincial	.....	498.69	12.18	1177.33	461.55	2149.75	38.02	31.95	69.97
	Classified	**.34**	**14.66**	.....	.....	.....	**15.00**	.....	.....	.....
43. Dawson Creek .	Provincial	.....	419.24	32.90	1739.33	295.57	2487.04	42.87	1961.50	2004.37
	Classified	.....	**37.83**	.....	**68.00**	.....	**105.83**	.....	.....	.....
44. Fort St. John	Provincial	.....	228.82	46.20	1755.11	413.40	2443.53	47.90	1233.20	1281.10
	Classified	.....	**62.61**	.....	**14.26**	.....	**76.87**	.....	.....	.....
45. Vanderhoof ...	Provincial	.....	297.53	.90	979.87	112.08	1390.38	110.32	240.45	350.77
	Classified	.....	**35.97**	.....	.....	.....	**35.97**	.....	.....	.....
46. McBride	Provincial	.....	293.17	127.40	228.44	32.62	681.63	61.10	11.83	72.93
	Classified	.....	**2.45**	**1.06**	.....	.....	**3.51**	.....	.....	.....
47. Williams Lake	Provincial	.....	453.16	7.33	1351.72	1201.62	3013.83	72.73	30.86	103.59
	Classified	.....	**9.43**	.....	.....	.....	**9.43**	.....	.....	.....
Regional Totals .	Provincial	.....	2665.78	339.98	7849.40	2743.73	13598.89	523.70	3641.18	4164.88
	Classified	**.34**	**231.69**	**1.06**	**91.84**	.....	**324.93**	.....	.....	.....
REGION 5										
51. Prince Rupert	Provincial	.....	258.20	.....	183.89	28.00	470.09	32.81	76.28	109.09
	Classified	.....	**86.18**	.....	**8.99**	.....	**95.17**	.....	.....	.....
52. Terrace	Provincial	.....	237.04	7.29	203.02	2.85	450.20	49.79	87.83	137.62
	Classified	.....	**18.85**	.....	.....	.....	**18.85**	.....	.....	.....
53. Dease Lake ...	Provincial	.....	32.36	147.38	583.72	107.68	871.14	.....	.50	.50
	Classified	.....	.....	.....	.....	.....	.....	.....	.....	.....
54. Smithers	Provincial	.....	226.81	7.28	745.12	35.61	1014.82	16.60	115.30	131.90
	Classified	.....	**20.94**	**.69**	.....	.....	**21.63**	.....	.....	.....
55. Burns Lake ...	Provincial	.....	231.90	.....	574.20	182.50	988.60	47.70	35.70	83.40
	Classified	.....	**39.20**	.....	.....	.....	**39.20**	.....	.....	.....
Regional Totals .	Provincial	.....	986.31	161.95	2289.95	356.64	3794.85	146.90	315.61	462.51
	Classified	.....	**165.17**	**.69**	**8.99**	.....	**174.85**	.....	.....	.....
REGION 6										
61. Nanaimo	Provincial	.....	502.30	283.80	369.45	1.15	1156.70	4.58	98.00	102.58
	Classified	.....	**89.51**	.....	.....	.....	**89.51**	.....	.....	.....
62. Saanich	Provincial	.....	315.91	433.95	347.74	20.57	1118.17	12.08	115.09	127.17
	Classified	.....	**85.57**	**22.17**	.....	.....	**107.74**	.....	.....	.....
63. Port Alberni .	Provincial	.....	440.90	131.70	330.70	1.20	904.30	10.00	402.60	412.60
	Classified	.....	**23.23**	**3.68**	.....	.....	**26.91**	.....	.....	.....
64. Courtenay	Provincial	.40	644.90	320.30	426.00	5.20	1396.80	11.95	154.42	166.37
	Classified	.....	**76.72**	**18.01**	**1.61**	.....	**96.34**	.....	.....	.....
Regional Totals .	Provincial	.40	1903.81	1169.75	1473.89	28.12	4575.97	38.61	770.11	808.72
	Classified	.....	**275.03**	**43.86**	**1.61**	.....	**320.50**	.....	.....	.....
Totals	Provincial	6.87	10684.16	5263.89	19428.44	5411.87	40795.23	1508.24	5793.66	7301.90
	Classified	**61.91**	**1960.02**	**142.31**	**112.26**	.....	**2276.50**	**2.18**	**8.16**	**10.34**
Grand Totals ...	Provincial **& Classified**	68.78	12644.18	5406.20	19540.70	5411.87	43071.73	1510.42	5801.82	7312.24

REPORT OF THE CHIEF RECORDS CLERK

C. E. Parker

The 1981/82 fiscal year was a changing and progressive year in General Office.

In the 1981/82 fiscal year the General Office received additional office space to accommodate the Pitney Bowes new mail handling equipment and letter sealer.

The increase in Postal Rates produced some changes in the mail handling procedures carried out by our mailing staff.

The office received 140 different tendered jobs and projects ranging from a few hundred to several million dollars.

REPORT OF THE INSURANCE AND CLAIMS OFFICER

G. A. Cavin

The period involved in the motor vehicle statistics is from April 1, 1981, to March 31, 1982.

The number of traffic accidents involving vehicles owned by (or leased to) the Government was 2,145, including 174 accidents in which the Government vehicles were parked. In the previous year there were 2,056 accidents.

MOTOR VEHICLES INVOLVED IN ACCIDENTS

(1980/81 figures in parentheses)

Ministry	Number of Accidents	Number of Vehicles	Per Cent of Vehicles	Per Cent of Accidents
Agriculture and Food	32 (30)	184 (178)	1.8 (1.7)	1.5 (1.5)
Attorney General	182 (215)	966 (932)	9.2 (8.9)	8.4 (10.4)
Consumer and Corporate Affairs	12 (14)	56 (81)	0.5 (0.8)	0.6 (0.7)
Energy, Mines and Petroleum Resources	15 (13)	109 (110)	1.0 (1.0)	0.7 (0.6)
Environment	78 (63)	690 (652)	6.5 (6.3)	3.6 (3.1)
Finance	11 (7)	64 (63)	0.6 (0.6)	0.5 (0.3)
Forests	489 (516)	1,740 (1,684)	16.5 (16.2)	22.7 (25.1)
Health	263 (217)	973 (1,033)	9.2 (9.9)	12.2 (10.5)
Human Resources	121 (117)	502 (528)	4.8 (5.1)	5.6 (5.7)
Labour	32 (22)	184 (178)	1.8 (1.7)	1.5 (1.1)
Lands, Parks and Housing	91 (73)	453 (495)	4.3 (4.8)	4.2 (3.6)
Provincial Secretary and Government Services	42 (19)	111 (102)	1.0 (1.0)	1.9 (0.9)
Transportation and Highways	776 (747)	4,431 (4,305)	42.0 (41.4)	36.0 (36.3)
All Other Ministries	12 (5)	79 (61)	0.8 (0.6)	0.6 (0.2)
Total	2,156*(2,058)	10,542(10,402)	100.0(100.0)	100.0(100.0)

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* There were 11 accidents involving two or more vehicles of different ministries. There were 112 accidents involving two or more vehicles of the same ministry.

The Government recovered, either from its own collision damage insurers or from third-party liability insurers, a total of $381,350.

Claims other than those arising out of accidents involving Government motor vehicles resulted in recovery of repair costs of $744,320 for damages to 87 guardrails, 65 bridges, 39 signs, 218 lamp or signal standards, 30 fences, 48 posts and poles and 76 miscellaneous items such as flagging, cleanup of spills, pavement repairs and vandalism. Included in these recoveries were eight claims against insurance policies purchased by the Government totalling $27,765 and $1,333 for damage to British Columbia Ferry Corporation property. Some of the major items of recovery for damage were $173,000 for damage to Government property in a leased building; $12,047 for damage to North Fernie Bridge; $10,650 for damages to the south end of Nine Mile Bridge in Boston Bar, and $10,508 for damages to bridge railing on the Spuzzum Creek Bridge, Hope, B.C.

Not included in the foregoing are 107 claims arising from the transferring of Government employees, 104 of these being for damage to household effects, and three for damage to mobile homes. The value of claims processed during the period totalled $61,250.

The total paid out for 753 miscellaneous third-party claims was $297,743 including $5,349 for five claims handled on behalf of the British Columbia Steamship Company. The largest single claim paid out was $80,000 for injuries resulting from a traffic accident, $5,000 of which was contributed by the contractor.

In 28 law suits in which the Government was the defendant, 12 were settled out of court, three were withdrawn, three were dismissed, one judgment was given in favour of the plaintiff, one judgement was two-thirds in favour of the plaintiff, six discontinued, one judgment for Crown and one settled by equal division of liability.

There are presently 62 cases in various stages of litigation, the Government being the plaintiff in 17 of these.

PREMIUMS PAID FOR INSURANCE PLACED DURING 1981/82

B.C. Steamship Co. (1975) Ltd.	$ 60,615.49
Ministry of Transportation and Highways	207,043.02
Commissions and other ministries	156,232.55
Total	$423,891.10

HIGHWAYS OPERATIONS

REPORT OF THE DIRECTOR OF HIGHWAYS DESIGN AND SURVEYS

E. E. Readshaw, P.Eng

Program

Highway designs and surveys worked on during the fiscal year April 1, 1981, to March 31, 1982, are listed in this report. There are 299 projects representing 1 623.0 km of two- and four-lane highway.

Design Activities

Of the designs completed, 10 major projects representing 83.95 km, were awarded to contract and 76 projects for construction by the Ministry's own forces, representing 272.0 km of minor highway or accesses.

This year has seen the detailed design work for the Annacis Island route well advanced, with layouts for the interchanges at Highway 99, Highway 10, Cliveden Road, Westminster Highway and Hamilton Road ready for finalizing. The whole route passes over peat bogs and soft ground requiring special measures to support the embankments at the bridges (22 of them) to control settlement. The use of lightweight fill is required and studies indicate that woodwastes (termed hog fuel) will be used to provide this, although the use of power station fly ash is also under investigation. An environmental and socio-economic study of the route is complete which outlines concerns about fish, wildlife, heritage resources and community effects and recommends methods of dealing with the impact of the new facility on these factors.

Design work on the Northeast Coal Resources access road is completed and all the work has now been let to contract.

Serious floods and debris flows on creeks crossing the Squamish Highway this winter have highlighted the need to make improvements to the 20-year-old route. To this end, realignment designs are being implemented at the trouble spots. In addition, passing lanes at Furry Creek and Lions Bay are under consideration to relieve the queues caused by the winding alignment of the road which now prohibits safe passing. This will improve the level of service until it becomes possible to completely reconstruct the highway.

The Ministry is continuing the design work to provide four-lane capacity on Highway 97 through the Okanagan, on Highway 7 between Coquitlam and Mission and on Highway 1 between Victoria and Nanaimo, but the cost and difficulty of the work is great because of the effect on properties and access to the highway. As interim strategy, short sections of one or two km of these busy routes are being widened to four lanes to facilitate safe passing manoeuvres in both directions. The older three-lane sections built for trucks are becoming increasingly congested in the downhill direction now that passing on that side is prohibited.

Design work on Highway 16 between Terrace and Prince Rupert is almost completed so that upgrading of that route can be achieved in conjunction with the construction of the port of Prince Rupert. The work is required to free the CNR right of way from the current encroachments of the existing highway, to eliminate grade crossing by relocation or with overpasses and to avoid avalanche areas. Other sections on Highway 16 at Burns Lake, Vanderhoof and Prince George also require overpasses of the CNR.

The following table is a list of the projects being designed and it shows the three principal stages of investigation—"preliminary studies" being work carried out to determine the most acceptable and feasible alignment, "surveys" which consists of field work to obtain engineering detail and "design" in which final detailed plans are prepared for construction.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 1					
Capilano Interchange	.5	65			
Capilano–Lynn Valley (including Westview and Lonsdale)	6.9		90	60	Consultant.
Lynn Valley Interchange	.5	20			
Cassiar Street Upgrading	2.0	100	99		Awaiting Environmental Social Study.
Sumas Canal to Vedder Canal	3.9	100			Application to Land Commission Replace Old Westbound Lanes.
Vedder Interchange (Old Yale Road)		75			
Sardis Interchange	1.6	5	100		
Gibsons Road Overpass and Approaches	0.6		100	60	
Annis Road Interchange	1.5	100			
Chilliwack to Junction 9: Weigh Scale Site	1.13	100			
Wahleach Power Station–Jones Creek	9.6		100	32	Metric Conversion Required.
Floods to Hope	9.7		100	99	
Hope Bridge Approaches	1.5		85		Improve Sharp Curves.
Gordon Creek Bridge	0.5		100		Washout of Culvert.
Cache Creek–D.L. 8	13.0		100		Future 4-Lane.
CPR Grade Separation, East Junction at Savona	0.44		100	40	
Savona Hill to Cherry Creek Passing Lakes D.L. 824 to Section 27	3.2		100		
Cherry Creek–Cornwall Lodge	10.5		100	5	4-Lane Improvement.
Kamloops Bypass East Interchange	0.1		100		Improve Ramp.
Cedar Heights and Shuswap Estate Left Turn Slot	1.6		95	80	
Shuswap Avenue–40th Street Northeast (Salmon Arm)	4.6	40	30		4-Lane Curb and Gutter.
Malakwa West Entrance	1.2		95	95	
Highway 1 Junction Craigellachie –Lybarger	1.2		95	90	
Oregon Jack–Cache Creek	37.98		100	100	4-Lane Improvement.
Three Valley Gap	1.0		100		Access Improvement.
Revelstoke (Highway 23 and Victoria Road West Intersection)			90	10	4-Lane Curb and Gutter.
Golden–Yoho Bridge	11.0	100	75		4-Lane Improvement.
East of Yoho Bridge	4.0		60		4-Lane Improvement.
Thetis Overhead to Spencer Road	15.0	35			Preliminary 4-Laning Design.
Malahat Km 20.0 to 21.5	1.6		87		4-Lane Passing Section.
Mill Bay–Duncan	15.0		62		Upgrade Existing 4-Lane and Frontage Roads.
Tourist Information Site Access (Boatland)	0.6		100	10	Duncan—Sherman Road Area.
Westdowne Road—Ladysmith	6.4		100	95	4-Lane Improvement.
Ladysmith—Carmichael Road			100	98	4-Lane Improvement.
Nanaimo Couplet Terminal/Wallace	0.5	1			
Cypress Street–B.C. Ferry Terminal Curb and Gutter	1.2		58		4-Lane Curb and Gutter.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 3					
Hope–Nicolum Creek	8.8		100	15	
Hope–Princeton (Nicolum Creek Bridge Site)	1.0		80	75	
Rhododendron Flats			28	5	4-Lane Passing Section.
D.L. 980 to Princeton	5.6		100	80	4-Lane Improvement.
Stirling Creek to Hedley	8.0		100	95	4-Lane Improvement.
Hedley to Winters Creek	6.11		99	20	4-Lane Improvement.
Winters Creek to D.L. 1970	3.2		80		4-Lane Improvement.
Keremeos East Approaches	1.6		100		4-Lane Improvement.
Midway Railway Crossing	1.0		60		R.R. Crossing Site Improvement to Sharp Curve.
Castlegar Interchange	1.0		100	25	Upgrade Ramps.
Salmo–Creston Summit Revision	6.0		100	90	Avalanche Avoidance.
Creston Bypass Alice Siding-Arrow Creek	10.6		100	96	New 2-Lane Design.
Upper Moyie Lake Section	6.0		100	5	2-Lane Improvement.
Highway 3 and 95A Interchange at Cranbrook	2.0	100			
CPR Hill Project Wardner Area	2.0		100	20	Grade and Alignment Improvement.
Elko–Morrissey	7.5		25	12	Widening Project 2 Lanes.
Highway 3 and Erickson Road Intersection	1.0		60		
Michel Mouth Bridge to Old Town (Michel Bridge)	3.0		100		
Highway 3A					
Keremeos to Kaleden (D.L. 1711 to D.L. 2769)	3.2				4-Lane Improvement.
Keremeos Creek Road to Twins Lake Golf Course					4-Lane Improvement.
Keremeos to Kaleden (Twin Lake to Yellow Lake)	0.8	1	100		4-Lane Through IR 2 and IR 9.
Nelson Bridge–Km 2	2.0		100	35	2-Lane Alignment Improvement.
Highway 3B					
Trail–Glenmerry	3.0		95	15	4-Lane Improvement.
Fruitvale	0.5		5		4-Lane Improvement.
Murphy Creek	0.5		40		B.C. Hydro Request for Relocation of Highway for Future Dam Site.
Highway 4					
Cameron River–Alberni Junction	2.6		99		2-Lane Improvement.
Cameron Lake	5.4		100	95	2-Lane Improvement.
Lockwood Creek–Cameron River	10.1		99	80	2-Lane Improvement.
Whiskey Creek–Lockwood Creek	4.98		99		2-Lane Improvement.
Johnson Road, Alberni	1.0		100	90	4-Lane Curb and Cutter.
Highway 5					
Paul Creek to Heffley Creek	19.3		100	65	4-Lane Improvement.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 5—Continued					
Preachers Hill to D.L. 810	3.2		100	10	2-Lane Improvement.
Shumway Lake–Junction Highways 1 and 5			5		4-Lane Improvement.
Highway 6					
Aberdeen Road to Ricardo Road East of Vernon	3.7		90	10	4-Lane Improvement.
Dutchman Creek–Monashee Creek Heckman Creek Slide	1.0		5		2-Lane Improvement.
Vernon, 27th Street to 32nd Avenue			75		4-Lane Curb and Gutter.
Lumby: Vernon Street C & G	.916		100	100	4-Lane Curb and Gutter.
Cape Horn to Cory Creek Slocan Bluff	5.92		100	98	2-Lane Improvement.
Cory Creek–D.L. 1474	6.4		100	55	2-Lane Improvement.
Inonoaklin Crossing–Deep Creek	12.0		100	10	2-Lane Improvement.
Needles–Bench Creek	16.0	50			2-Lane Improvement.
Highway 7					
Mary Hill Bypass, Section 2			85	80	New 4-Lane Arterial.
Cape Horn to Colony Farm	2.0			50	
CPR O/P Widening Cape Horn Interchange	1.0				4-Lane Improvement.
Haney to Whonnock	7.0		100	97	4-Lane Improvement.
Whonnock to Silverdale	5.0		100	97	4-Lane Improvement.
Silverdale Creek–Hurd Road	7.4		92	60	4-Lane Improvement.
Mission Roadworks, Section 2 and 3 North Approaches to Mission Bridge	0.3		100	95	4-Lane Improvement.
Highway 7A					
Barnet Highway Sperling Avenue to D.L. 114	4.5		68	45	4-Lane Improvement.
Port Moody Grid Roads	8.0	30			New Arterial.
Barnet Highway D.L. 114 to St. Johns Street	4.4		68	44	4-Lane Improvement.
Highway 8					
Spences Bridge, Merritt Bridge Sites	1.0		100	10	New Bridges.
Highway 11					
"C" Street to McLure via Beck	0.5	2			New 4-Lane Arterial.
"C" Street to McLure via Railway	0.5	2			New 4-Lane Arterial.
Highway 12					
Lillooet–Station Road Overpass of BCR	0.7		100	80	Replacing Grade Crossing.
Highway 14					
Sooke Road, Humpback Road and Kangaroo Road Areas	4.5		32		4-Lane Passing Sections.
Kirby Creek Bridge and Approaches	0.8		100	10	Replace old Bridge and Improve Approaches.
Jordan River–Port Renfrew Mile 11.5 to Mile 18.5	2.0		92	25	Improvement in Sombrio Area.
Jordan River Bridge Approaches	0.8		100		
Highway 16					
Prince George Fraser River Crossing at 1st Avenue	2.0	93	100		Proposed New Fraser River Bridge to Replace Existing CNR Bridge.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 16—Continued					
Tyee to Khyex River	12.2		100	35	2-Lane Improvement.
D.L. 4804 to Andesite Creek Polywog Creek Overhead	9.0		20		2-Lane Improvement.
South Hazelton Kitsequecla Bridge to Carnaby Crossing	9.2		100	30	2-Lane Improvement.
Kathlyn Lake Road Intersection			40	10	Intersection Improvement.
Smithers Arterial Toronto Street to Alberta Street	1.6		100	5	New Arterial.
Smithers Telkwa, Section 2	8.0				New Arterial.
Houston, Butler Avenue to Buck Creek	0.7		100	10	
Burns Lake Bypass	18.0		30		4-Lane Curb and Gutter.
Terrace: Kennedy Street–Eby Street Curb and Gutter	1.1		100	100	4-Lane Curb and Gutter.
Highway 16A					
Smithers to Telkwa Grid Road West of Bulkley River	27.0	30			New Arterial Route.
Highway 17					
McKenzie Avenue Interchange	1.0	100			
Beacon Avenue Interchange	1.0	65			
Highway 19					
Nanaimo Bypass	23.0		37		
Nanaimo Bypass Study	23.0	100			Environmental Engineering Study.
Northfield Road Intersection	1.0		75	10	Provision of Left Movements from Highway 19.
Bowen Road and Rock City Road Intersections	1.0		100	95	Upgrading.
Hammond Bay Road–Superior Road	5.0		90	10	4-Lane Improvement.
Highway 4–Dashwood (Parksville and Qualicum Bypass)	16.0	99			Environmental Engineering Study.
Parksville Curb and Gutter Molliet Street to Englishman River	4.1		100	97	4-Lane Curb and Gutter.
Pym Road Intersection North of Parksville	0.8		5		Improvement.
Qualicum Area (French Creek) Eaglecrest Drive Intersection	0.6		100	90	Improvement.
French Creek Area Sunrise Drive Intersection	0.5			10	Improvement.
Union Bay–Royston	6.3				4-Lane Improvement.
Courtenay Arterial Curb and Gutter Embleton Street to 21st	1.6		100	75	
Rockland Avenue and Highway 19 Willow Point Area	0.4		100	99	Intersection Improvement.
Willow Point Curb and Gutter	1.2		95		4-Lane Curb and Gutter.
Duncan Bay to Menzies Bay	8.0		100	20	Improve 2-Lane Alignment.
Cluxewe River Site Plan and Aproaches	1.5		100	100	
Port Hardy to Coal Harbor Area Lamonte Creek Site Plan and Approach	0.5		100	75	

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 20					
Keogh River Site Plan and Approaches	1.2		100	50	
Nelson Bridge No. 1326 Site Plan	0.3		100		
Highway 20					
Bella Coola Bridge Site Plans	2.0		95	55	
Alexis Creek to Bull Canyon	10.0				2-Lane Alignment Improvements.
Klinaklini River Bridge Approaches	2.0				
Highway 22					
Rossland Curb and Gutter Columbia Avenue	1.6		100		4-Lane Curb and Gutter Upgrading.
Trail to Tadanac Relocation	1.6		100	90	Consultant—New Approaches to Trail through Smelter.
Castlegar Curb and Gutter 7th Avenue, 16 Street to Highway 3	3.2				4-Lane Curb and Gutter.
Highway 24					
Phinetta Lake to District Boundary	5.2		100		New 2-Lane Highway.
Little Fort–Phinetta Lake	0.5		100	100	New 2-Lane Highway.
Highway 28					
Buttle Narrows Site Plan and Approaches	1.1		100	99	
Echo Lake Forbes Landing to Camp 8	8.0		99		2-Lane Improvement Existing Road.
Highway 29					
Site "C" Dam Road Diversion, Section 1			99	45	B.C. Hydro Relocation for Proposed Reservoir
Site "C" Dam Road Diversion, Section 2			70	35	B.C. Hydro Relocation for Proposed Reservoir
Highway 31					
Trout Lake—Gerrard West Side Wilkie Creek to Asher Creek	10.0		80		New Line Avoids Gerrard Bridge.
Trout Lake—Gerrard West Side Asher Creek–Gerrard	19.0		45		New Line Avoids Gerrard Bridge.
Relocation of Highway 32 and Davis Creek Bridge at Lardeau	1.0		100	10	New Line Avoids Gerrard Bridge.
Highway 33					
Highway 97–Mackenzie Road Rutland Curb and Gutter	3.5		30	10	4-Lane Curb and Gutter.
Highway 35					
Overpass, CNR at Burns Lake (Highway 16 to Highway 35)	1.0		80	5	Replacement of Grade Crossing.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 37					
Kitwanga—Nass River Cranberry River to Derrick Creek	17.7		100	85	New 2-Lane Section Stewart Cassiar Road.
Dease Lake–Sawmill Point	41.0		90		Upgrade Existing Road.
Burrage River 6.0			90	10	Upgrade Existing Road.
Blue River–Yukon Territory boundary	30.0		100	90	Upgrade Existing Road.
Willow River–Rescue Creek	5.5		95	10	Upgrade Existing Road.
Todagin Creek	3.2		95	10	Upgrade Existing Road.
Highway 49					
Dawson Creek Curb and Gutter 8th Street to City Boundary	1.2		100		4-Lane Curb and Gutter.
Highway 95					
Radium Junction	1.0		80	10	Intersection Improvement.
Highway 95A					
Kimberley Curb and Gutter Archibald Street–Kimbrook Crescent	1.6		100	25	4-Lane Curb and Gutter.
Highway 97					
McAlpine Bridge to Vaseux Lake	10.1		98	5	4-Lane Improvement.
Kaleden Junction	1.4		50	90	New Weigh Scale Site.
Pentiction Channel Parkway, Section 2 (Fairview Road and Eckhardt Avenue)	3.2		100	99	4-Lane Arterial.
Penticton–Trout Creek	8.0		100	63	4-Lane Improvement.
Trout Creek–Summerland	8.0		98		4-Lane Improvement.
Westbank Curb and Gutter Gormans Mill to IR 9	3.5		100	62	4-Lane Improvement.
Westbank–Kelowna, Section 1 IR 9 and East Boundary Road	3.7		100	99	4-Lane Improvement.
Harvey Avenue, Kelowna (Kelowna Bridge to Princess)	1.6		90	12	6-Lane Curb and Gutter.
Ellison Lake–Wood Lake Winfield Curb and Gutter	10.6		30	10	Left Turn Slots at Beaver.
Oyama Road Intersection	0.8		100	99	2-Lane Improvement to Intersection.
Oyama–Bailey Road	9.0		95	40	4-Lane Improvement.
Bailey Road–Vernon	11.0		95	99	4-Lane Improvement.
Vernon 27th Street Extension (32nd Avenue to Reservoir Road)	2.1		20		New 4-Lane Arterial.
Barnhartvale Road to Monte Creek	8.0		100	85	Improve Existing 2-Lane.
Cache Creek to Loon Lake Road	21.0		100		Future 4-Lane Improvement.
Clinton Underpass Approach	2.0		100		New 4-Lane Improvement of Substandard 2-Lane.
Mile 83 to Mile 94	17.5	40			Realign (4-Lane).
Borland Creek (150 Mile House)	1.5		30	100	Design for Creek Crossing.
Dragon Hill	2.0	1			4-Lane Improvement.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Highway 97—Continued					
North Star Interchange, Quesnel	1.6		100	98	New Interchange to Replace Intersection.
Quesnel Bypass	5.0	55			Proposed Future Arterial.
Fifth Avenue Interchange, Prince George	0.7		100	60	To Replace Existing Intersection.
Bear Lake to Red Rocky Creek	14.0		100	55	Upgrade Existing 2-Lane.
Red Rocky Creek to 42 Mile Creek	19.6		100	35	Upgrade Existing 2-Lane.
D.L. 8917 to Garbitt Tunnel Section	13.3		100	96	Upgrade Existing 2-Lane.
Bennett Creek–Westpine River Bridge	20.9				Upgrade Existing 2-Lane.
East Pine (West Approach)	4.0		100	10	Upgrade Existing 2-Lane.
Chetwynd Underpass, BCR Crossing	1.2		91	83	Replace BCR Grade Crossing.
Fort St. John Storm Drainage McKenzie Street to 88th Street	1.6		100	80	Pipe Existing Ditches.
Highway 97A					
Swan Lake to Crozier Road	7.5		90	40	4-Lane Improvement.
Highway 99					
Stanley Park Causeway	2.4		90	60	Reconstruct Old Concrete Pavement Sidewalks and Drainage.
Britannia Beach R/W Survey	1.2		80		4-Lane Improvement.
Brohm Lake to Cheakamus Canyon	16.1		100	66	Upgrade Existing 2-Lane Alignment.
West Road–Mons	8.0		37		Whistler Townsite 4-Lane Improvement Part Curb and Gutter.
Highway 99A					
64th–Nikomekl River	7.2		25		4-Lane Improvement.
Kingsway (Edmonds–10th Avenue)			98	35	6-Lane Curb and Gutter.
Highway 101					
Langdale–Gibsons	6.43		50		New 2-Lane Arterial.
Sechelt 4-Lane Bypass, Airport to Trout Lake	23.3		72	60	
Secret Cove–Madeira Park Realignment of Existing Road	9.7		99	57	
Miscellaneous Highways					
Region 1					
Stormont Interchange–McBride Boulevard	3.2		100	5	
Chancellor Boulevard C & G Acadia Road to Drummond Road	1.5		98	95	
Queensborough Bridge North Approach	2.7	70			Part of Annacis Bridge Roadworks.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Miscellaneous Highways					
Region 1—Continued					
Marine Way, Section 2 Byrne–Queensborough Bridge	2.7		100	100	Awarded to Contract.
Bridge Road–River Road (River Road to Industrial)	3.2		100	7	New 4-Lane Arterial.
Highway 99—Fraser River, Annacis Roadworks	8.5		98	55	
Queensborough Connector, Annacis Roadworks	4.2		20	50	
Annacis Truck Route Belgrave to Carter	2.4		99	87	
Annacis Dredging, Contract 2	0.5		100	100	
Annacis Dredging, Contract 3	0.5			10	
Westminster Highway (Knight Street to Hamilton)	11.5	100			New 4-Lane Freeway from Annacis to Highway 99.
Scott Road (Highway 10 to 80th Avenue)	4.2		100	99	4-Lane Curb and Gutter.
Scott Road Highway 99 to Old Yale Road (Includes Pattullo Bridge Ramps)	2.4		100	95	4-Lane Curb and Gutter and Intersection Improvements.
Glover Road Springbrook–88th	3.5				
Glover Road 88th–96th					4-Lane Curb and Gutter, Fort Langley.
Scott Road (Old Yale Road to 96th Avenue)	4.5		50		4-Lane Curb and Gutter.
Interchanges Westminster Highway Alternates		80			Alternate Schemes.
North Shore Transportation Study, Section 1 Fern Street to Mt. Seymour Parkway	3.5	99		98	
North Shore Transportation Study, Section 2 Connection Keith Road — Highway 1	2.5			5	
North Shore Transportation Study, Section 3, Keith Road Brooksbank—Lillooet	1.0			5	
Lillooet River Crossing at Pemberton	0.8		100	75	
Mt. Currie–Duffey Lake	0.5	40			
Coquihalla Route 3, Peers Creek to Ten Mile Creek	5.1		80	90	
Coquihalla Route 5, Ten Mile Creek to Sowaqua Creek	3.7		100	60	
Coquihalla Route 6, Sowaqua Creek to Ladner Creek	6.1		90	89	
Coquihalla Route 7, Ladner Creek to Portia		90		5	
Coquihalla Route 8-11, Portia to Boston Bar Summit		30			
Coquihalla Route, Stage 2 Hope to Lear		65			Stage 2 Environmental Report.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Miscellaneous Highways					
Region 1—Continued					
Coquihalla Route, State 2 Lear to Shylock Landing		2			Stage 2 Environmental Report.
Cambie and Knight Street Interchange	0.8	100			
Port Mellon to Squamish	40.0	6			Aerial Mapping for Proposed Future Route.
Grantham Street Bridge North Vancouver		100			Approaches for New Bridge.
Harrison–Sasquatch		2			Improve Existing Road to Park.
Region 2					
Osoyoos (87th Street Improvements)	3.2		30		
Westside to Nahun IR 10 to Caesar's Landing	7.0		50	10	New Arterial.
Mabel Lake Road through Enderby (IR 2)	4.8		100	90	New Arterial.
Kamloops to Summit Drive, Section 2	4.8			10	
Dry Gulch to Mine Creek 13 and 14—Coquihalla	9.35		90	75	
Mine Creek to Julliet Creek 15—Coquihalla	5.9		65	20	
Julliet Creek to Brodie—Coquihalla	15.8		100		TMPL Crossing to Come 1981.
Brodie to Kingsvale—Coquihalla	11.0	53	47		
Kingsvale to Merritt—Coquihalla	28.0	90			
Merritt–Kamloops	73.7	2			Environmental Study.
Similkameen River Bridge at Keremeos	0.5	95			
Enderby via Cliff Street	0.8		100	80	New Bridge Approaches.
Sicamous Narrows Crossing Highland Valley Road Ashcroft—Highland Valley	8.0	100	100		
Halston Interchange to Junction Highway 5 and Paul Lake Road	3.2		100	5	North Thompson River Crossing.
Glenmore Street Extension	4.98		100	100	
Region 3					
Elk Valley Road Sparwood-Cummings Creek	4.0		100	96	New Arterial.
Nelson Waterfront Road	1.6		100	15	City Arterial.
Pass Creek Road	4.0	95			
Syringa Creek–Deep Park	10.0		100		
Burma Road Part of Fernie Network	5.0		95		New Arterial Route.
Slocan Valley Bridges					
Slocan Park Bridge	0.2		100	15	
Passmore Bridge	1.0		100		
Wardner—Fort Steele Road Wildhorse Creek Revision	0.8		100	95	
Athalmer–Highway 93 and 95	2.0		100	10	New Bridge Approaches.
Lower Tony Creek Road (Invermere–Lillian Lake)	4.7		20		Line Improvements.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Miscellaneous Highways					
Region 3—Continued					
Slocan Valley Bridges—Continued					
Cranbrook-Kimberley Airport North Access	12.0		50		New Route Study.
Left-Turn Lanes at Roadside Rest Areas			100	50	
Left-Turn Lanes at Roadside Rest Areas			100	50	
Left-Turn Lanes at Roadside Rest Areas			50	25	
Left-Turn Lanes at Roadside Rest Areas			100	50	
Region 4					
Foothill Road–Chief Lake Road, Section 1, Prince George	2.1		100	80	Prince George Arterial Network.
Patricia Avenue–Northwood Pulp Access, Section 1, Prince George	2.0		80	15	Prince George Arterial Network.
North Nechako Road, Northwood Pulp Access, Section 2, Prince George	6.0		75		Prince George Arterial Network.
Hansard Bridge Approaches	3.2		15		Future Bridge on Fraser River at Hansard.
Fox Mountain Road, Williams Lake	6.0		100	100	Estimate to Williams Lake Highway District.
Northeast Coal Access Martin Creek to Upper Martin Creek	15.0		100	100	New 2-Lane Highway Access to Coal Area.
Northeast Coal Access Upper Martin Creek to Gwillim Lake	13.4		100	100	New 2-Lane Highway Access to Coal Area.
Northeast Coal Access Gwillim Lake to Meikel Creek	4.9		100	100	New 2-Lane Highway Access to Coal Area.
Meikel Creek to Bullmoose	14.8		100	100	New 2-Lane Highway Access to Coal Area.
Northeast Coal Access Feller Heights to Tumbler Ridge	63.0		58		New 2-Lane Highway Access to Coal Area.
District Road No. 151 Beatton River Buick Creek to D.L. 2994	40.0		100		Ft. St. John Area.
Clayhurst Bridge Site (Peace River Rolla District Road 43)	1.0		100		
Teko Road Septimus–Pine River	10.0	100			Proposed Route South Side of Peace River.
Vanderhoof 4th Street to Victoria Street Boundary Avenue Highway O/H CNR	1.0		80		Replace CNR Grade Crossing.
Vanderhoof CN O/P on Burrard	0.3	56			Replace CNR Grade Crossing.
Region 5					
Kitimat Industrial Road from Alcan Road to Kitimat Dock	4.4		40	40	Junction Design Only.

Name of Project	km	Prelim. Study	Survey	Design	Comments
Miscellaneous Highways					
Region 5—Continued					
Aiyansh, Section 2 Nass River Bridge to Greenville	12.5		90	20	Survey Extended Through IR.
Region 6					
McKenzie Avenue Highway 17 to Highway 1, Saanich	2.4		100	99	
Helmcken Road Extension Burnside, Saanich	0.3		100		
Wale Road, Colwood, Victoria	0.8		70		Proposed Arterial Line.
Shawnigan Lake Road (E & N Underpass)	0.8		12		Alignment Improvement.
Compton Road	0.6		100	15	
Crofton Access (Original Route)	6.4		65	96	
Crofton Access	6.4	100			Environmental Engineering Study.
Crofton Access Alternate Route	7.0		50		
Courtenay Area Lazo Road to Miracle Beach	27.0		100	90	
Wally Creek Site Plan	1.6		98		
Marble Creek Site Plan and Bridge Approaches (Alternate)	0.5		100	20	
Durrance Lake Road Relocation	6.0	100	50		New 2-Line Route.
Port Albion Bridge and Approaches	2.8		55		
Sacht's Bridge and Approaches (Sayward–Kelsey Bay)	2.0		100		Bridge Across Salmon River.
Riverbottom Road, Section 4	10.0		98	80	
Kelley Road Extension	0.9		100	100	
Meaford–Latoria					New Arterial.
Gold River–Tahsis (Upana Summit–Tlupana Creek)	8.0		40	15	Upgrade Existing Route.
Rennison Bridge No. 7684 and Approaches	0.6		36		
Yellowpoint Road, Section 4	1.2		100	90	
Theimer Bridge No. 1.2233 and Approaches (Beaver Cove Road)	1.0		80		
Tsoulton Bridge No. 2163 and Approaches (Beaver Cove Road)	1.4		35		
Clanton Road Extension Galiano Island	1.0		100	100	

Preliminary Study Section

Before design can be undertaken studies of possible and feasible routes must be made. These activities are shown on the above listing under the heading of Preliminary Studies April 1, 1981, and March 31, 1982. A necessary part of these studies is aerial mapping at various scales obtained from aerial photographs. To this end, sufficient high level photography was obtained to produce low order reconnaissance mapping on the following:

1. Duffey Lake–Seaton Lake.
2. Likely Townsite.
3. Teko Road.
4. Port Mellon–Squamish.
5. Keremeos Creek Road–Twin Lakes Golf Club.

Sufficient low level photography was obtained to produce high order mapping on the following:

1. Harrison–Sasquatch.
2. West Road–Mons (Whistler).
3. Port Roberts Road.
4. Mill Bay–Cowichan Bay.
5. Nelson–Balfour.
6. "C" Street–McLure (via Beck).
7. "C" Street–Mclure (via Railway).
8. Parsons Bridge–Colwood Corner.
9. Needles–Bench Creek.
10. Como Lake–Kingsway.
11. North Shore Road (Port Moody).
12. Vedder River–Hope.
13. Kinnaird Interchange.
14. Dragon Lake–Quesnel.
15. North Thompson Crossing.
16. Kamloops–Heffley Creek.
17. Dease Lake–Sawmill Point.
18. Horseshoe Bay–Squamish

Low order mapping was obtained on the following:

1. Qualicum–Mud Bay.
2. Teko Road.
3. Keremeos Creek Road–Twin Lakes Golf Club.
4. Mt. Currie–Duffey Lake.
5. Hope–Princeton 26 km–60 km.
6. Merritt–Kamloops.

High order mapping was obtained on the following:

1. Shuswap Avenue–Highway 97B.
2. Dragon Hill.
3. Bowen Island.
4. Willow Point–Campbell River.
5. Edelweiss–Golden.
6. Annacis.
7. Nicomekl–64 Avenue.
8. Beacon Avenue Extension.

Archaeology

Although no major salvage work was carried out during the past year on any potential site, the Heritage Conservation Branch carried out an impact assessment on all highway projects at the regional and district level.

A preliminary assessment was made during the last year on the St. Mungo Cannery site on the Fraser River which will be crossed by the Annacis Bridge project. It is anticipated that a contract will be awarded for the salvage of this major historical site during the coming year. Also, the Ministry has continued the funding program for the continuation of impact assessments and minor salvage operations for the Heritage Conservation Branch in the coming year.

Metric Conversion

The duties of the Metric Coordinator were greatly reduced during the 1981/82 fiscal year because the Ministry personnel is now quite familiar with the S.I. system of measurement.

All contracts issued now contain some metric units and most are completely metric.

Outside suppliers of goods such as rolled steel and timber are still supplying in imperial measure. Where these items are required in a contract it is necessary to revert to that system of measurement, but, this does not present a serious problem.

All surveying and all new design work for grading contracts are done in metric measure.

The Ministry will maintain the large metric information signs at major border crossings and entry ports. It has also been decided that the "km" tabs will continue to be used on regulatory highway signs.

The Metric Coordinator continues to distribute information and printed material to Headquarters, Regional and District Staffs.

Sound Control

The position of Sound Control Studies Engineer (SCSE) has existed for over two years now. The main duties of the SCSE are the prediction of sound levels from proposed highways using both manual and computer techniques, the measurement of existing community sound levels along the proposed highway alignments, the evaluation of the resulting highway sound impact, and if necessary, the recommendation of sound abatement measures. This process was carried out wholly or in part on the following projects in the past year:

Annacis Island Crossing
Langley Bypass
Mission–Abbotsford (Highway 11) Bypass
Meaford to Sooke Road Section of the Millstream Extension
Mary Hill Bypass

There are currently two projects (Annacis Island Crossing and Trail–Tadanac Relocation) for which roadside sound barriers are planned and others for which they may be required.

The SCSE has been assisting the Equipment Services Branch in their efforts to control noise and vibration aboard the Ministry's ferries.

The first project involved the investigation, in conjunction with Vancouver Shipyards, of noise and vibration problems which developed aboard the M.V. *Balfour* following her recent repowering. The second project involves the setting up of an engine vibration monitoring program for Ministry ferries intended to reduce engine maintenance and resulting service interruption.

Computer Operations

The Highway Design and Surveys Branch continues to be one of the heavier computer users within the Ministry. A Branch computer needs study was completed during the past year by the Ministry's own analysts and a representative from B.C.

Systems Corporation. The terms of reference of this study group were to determine the requirements of the Branch, both present and future, for the many new and varied computer applications in the field of highway design.

The major recommendation of the study group was that a feasibility study be initiated by B.C.S.C. on interactive computer graphics. This system would be coordinated with the metric highway design computer package designed for the Branch by B.C.S.C. Some contract drawings such as profiles are now drawn entirely by computer. However, the above system would allow all engineering drawings to be so produced. This metric highway design computer package has proven to be of such good quality that it has since been adopted by the Ministry of Forests, B.C. Railway and a number of consulting engineering firms for use in highway design.

Over the past year the Branch has been very successful in producing highway perspective plots. It is now possible to see computer generated three dimensional drawings of the proposed roadworks including the associated surrounding terrain. These plots are valuable for the design engineers as well as the Construction Branch staff during pre-tender meetings. They are also a powerful communication medium for both administration and the public.

Consultants

This past calendar year the Ministry has requested consulting firms to carry out the survey and/or design work on the following projects, many of which are still under way.

1. Annacis Highway—20 km of new route for four and six laning.
2. Mary Hill Bypass—5.0 km new route Highway 7 at the Pitt River Crossing to Cape Horn Interchange.
3. Mission Roadworks—1.6 km Hurd Road to Mission.
4. Highway 7, Silverdale to Hurd Road—6 km of four laning.
5. Highway 1, Capilano to Lynn Valley—4.0 km freeway design.
6. Haney–Silverdale—18.5 km four laning.
7. Stanley Park Causeway—1.6 km reconstruction and re-surfacing of road through Stanley Park.
8. Scott Road–Highway 10 to 80th Avenue—4.2 km four-lane curb and gutter.
9. McKenzie Avenue Extension—1.5 km four-lane curb and gutter plus interchange design.
10. Summit Drive in Kamloops—4.8 km four-lane new urban arterial route.
11. Kamloops Interchange, Highway 1 and 5 at Aberdeen—3.0 km future interchange of two four-lane roads.
12. Vernon–32nd Street Extension North—3.0 km new four-lane route.
13. Vernon–Highway 6 from 27th Street to 32nd Avenue —0.8 km urban four lane.
14. Penticton Channel Parkway, Section 2—3.4 km four-lane part curb and gutter.
15. Rossland Avenue–Stoney—2.4 km new four-lane connection to Creek in Trail (Trail–Highway 3A near Cominco Tadanac Relocation).
16. Highway 23, Revelstoke—95.5 km replacement of two-lane highway Mica flooded by Revelstoke Dam.
17. Fifth Avenue Interchange—Fifth Avenue Overpass of Highway 97 at Prince George plus a diamond interchange at Prince George.
18. Northeast Coal Access—70.4 km new road to proposed coal development Martin Creek to Gwillim Lake.
19. North Star Interchange—4.3 km paved highway and approach ramps at Quesnel plus six-lane bridge (26 m long).
20. Highway 29 Relocation—24 km replacement of highway to be between Hudson Hope and flooded by Site "C" Dam Charlie Lake.

Consultants are also doing the following Environmental and Socio-Economic Impact Studies:

Highway 29 Relocation for B.C. Hydro's Site "C" Dam.
Mud Bay–Menzies Bay Environmental and Engineering Study.
Qualicum North Bypass Environmental and Engineering Study.
Kamloops–Merritt (Coquihalla) Environmental and Engineering Study.
Coldwater Indian Reserve (Coquihalla) Environmental Impact Study.

Hydraulic Engineer

Projects dealt with by the Hydraulic Engineer this year have included the Nass River Bridge at Greenville for which scour calculations and flood levels were calculated and river training works designed, and Culliton Creek at Squamish where the creek channel alignment and protection works were prepared. Similar types of calculations were also carried out for Michel Creek Bridge at Sparwood, the Cheakamus River Bridge at Squamish and the Coquitlam River Bridge on the Mary Hill Bypass.

In addition the Hydraulic Engineer has been involved in discussions between the Ministry and consultants on the hydraulic aspects of the Fraser River Crossings at Annacis Island the Northeast Coal Access Road.

With increasing development pressure in some of the unorganized areas of the Province, more emphasis is being given to storm drainage works. Where these designs are relatively complicated, involving retention periods or flow control structures, the Hydraulic Engineer has been advising the District Approving Officers on the adequacy and suitability of the land developers proposals.

Coquihalla Highway—Hope to Merritt

The functional planning of the 110 km Coquihalla Highway between Hope and Merritt is continuing. Of the 110 km, the functional planning is completed on 56 km, and at an advanced stage for an additional 25 km. Functional Planning Reports (Stage 2) are being prepared to present and record the information gathered to the end of the planning stage.

To date, two contracts totalling 9.1 km are essentially completed. Design is being carried out on seven contracts totalling 37 km and field survey is completed for an additional eight km.

Environmental Section

Environmental concerns were considered on a number of major projects throughout the Province over the past year. Of these, the Annacis Systems Project received a great deal of the attention. A detailed environmental Stage II study was undertaken on the southern section of the system, from the Fraser River south to Highway 99. An addendum to this study outlined mitigation and enhancement strategies to be incorporated into the final roadway designs. Planned for this year are a number of studies:

1. A fisheries/hydrology study to answer concerns about bridge piers and intended structures within the Annacis Channel.
2. An environmental land use assessment of the Gilley Road proposal in Richmond.
3. An Archaeological salvage of the St. Mungo Cannery site.

Two other major studies were completed. One was an environmental assessment of two routes and some alternatives for a bypass around Qualicum on Vancouver Island and the second describes detailed mitigation and enhancement for the Chetwynd Tumbler Ridge Highway. Consultants were hired to assess terrain hydrology, fisheries and wildlife concerns with Government Agencies contributing assessments on forestry, recreation, archaeological and agricultural resources affected by the highway.

Stage II studies are continuing on the first section of the Coquihalla Highway and for the upper Coldwater Valley. A Stage I socio-economic study was carried out for the Coldwater Indian Band and a detailed Stage II study is planned. The Fish and Wildlife Branch carried out a winter wildlife survey on the Merritt to Kamloops portion of the project and for the lower Coldwater Valley. It is expected that continuing studies outlining impacts and their amelioration will continue next year.

Following installation of wildlife reflectors on two test sections in the Province, results to date, indicate that the reflectors have reduced the number of wildlife vehicle collisions within the test areas. This project will continue for the next two years in order to document the effectiveness of these reflectors in preventing deer-vehicle collisions. In addition, a publication is in preparation documenting the results, since 1978, of wildlife vehicle collisions throughout the Province.

The Design and Surveys Branch were the recipient of the first Environmental Engineering Design Award given by the Association of Professional Engineers of British Columbia. The award was for the design, construction and effectiveness of the School House Diversion of the Coquihalla Highway Project.

REPORT OF DIRECTOR OF GEOTECHNICAL AND MATERIALS ENGINEERING

J. W. G. Kerr, P.Eng.

General

Promotions and replacement appointments affected 30 members of the branch establishment of 184. In addition, 49 on-going auxiliaries and 51 seasonal auxiliaries were employed during the year.

A number of staff attended a variety of specialty conferences and seminars. Papers were presented on the properties and engineering implications of glacio lacustrine silts and the methods and types of geotechnical exploration and instrumentation. Regional offices presented training sessions on soils, natural hazards, gravel management and pavement evaluation to regional staff.

Construction of the Branch office and laboratory in Terrace was started and completion is expected in the summer of 1982.

Geotechnical Highway Design

Investigations were carried out on 32 projects representing a total distance of 204 km. Approximately 80 km of this total was completed by air photo study and field inspection only.

The Annacis project was the major design project for this Branch. The poor foundation conditions, that have complicated the grade design, caused problems for the exploration crews. Preliminary highway design investigations are complete for the south side of the river, but work remains for the north side on Lulu Island.

A testfill was constructed and instrumented on Lulu Island to provide design parameters for the high fills associated with the interchanges along the Annacis route. Wick drains were installed in the test fill in order to accelerate settlement of the fill.

Foundation Investigation and Design

The Branch completed foundation investigations and designs on 47 projects. Of these, 10 are located along the Annacis route between Highway 99 and the Fraser River.

Weak foundation conditions required innovative designs utilizing lightweight fill materials. Designs were completed for four highway bridges associated with the Northeast Coal Development. The Branch also supplied exploration services at three bridge sites for B.C. Rail in the Northeast Coal project. The acquisition of a dynamic pile driving analyser has placed the Ministry as a leader in Canada in the use of dynamic analysis for foundation design.

Stability Investigation

A total of 51 investigations to maintain or restore stability for highway cuts and fills were completed. Of the slides, 20 were in Region 4, reflecting the size and geology of the region. The installation of horizontal drains at the Hixon Hill slide, Quesnel District appears to have solved chronic stability problems and a side hill fill on Highway 97 near the Nechako bridge in Prince George was stabilized with a granular berm and an extensive sub drain system.

Geotechnical Hazards

A total of 265 proposed subdivisions was investigated for stability. Quesnel District, Kelowna–Penticton area and the Gulf Islands were areas in which a high concentration of investigations were carried out. Development plans for three major ski areas, and an official settlement plan, were also reviewed for geotechnical hazards.

Aggregate Investigations

A total of 257 gravel pits and prospects was investigated in detail using electromagnetic surveying, in addition to backhoe pits, auger drilling and laboratory testing for gradation and soundness.

Sources of aggregate for highway in the Northeast Coal area were extensively investigated during the year.

Quality Control and Materials Testing

Testing to evaluate and inspect a wide variety of highway and bridge construction materials continued in Victoria and the regional laboratories. The Victoria laboratory served mainly as a specialized testing and resource centre for the Branch operations. A down hole acoustic emission sensing device, to monitor and detect slope instability movement, was designed and built, and modifications to the 10 t static cone were designed.

In the Regional offices a variety of materials including concrete products, chain link fence, lumber, barbed wire, culvert pipe and paint were tested for conformity to specifications. Some 3,350 concrete cylinders were tested for compressive strength for production control of mass concrete.

Drilling Operations

Over 50 per cent of the foundation drilling and testing carried out in 1981 was in Region 1. The bulk of this total was related to the Annacis Island Crossing where 3 460 m of test holes were drilled and tested. Total depth of drilling during the year was 21 632 m, of this total 14 044 m was carried out by regional crews, and 880 m was for horizontal drains.

Geophysical Services

The Branch completed 40 geophysical investigations. Seismic refraction surveys were carried out for over six km of soil and bedrock investigations and 270 km of electromagnetic conductivity surveys were run for soil and aggregate investigations.

Remedial Rock Work

Routine rock scaling was completed in all regions. Some 9 000 m^3 of rock was removed to improve the stability of existing rock cuts. The majority of the work was carried out in North Vancouver, Hope, Penticton, Kelowna, Golden, Terrace and Smithers Districts. Another 5 500 m^3 of unstable rock was removed between Horseshoe Bay and Squamish as a special project.

Pavement Evaluation

Benkelman Beam rebound testing, drilling and visual examination to provide design details for pavement reconstruction, overlays and repairs were completed on 61 projects representing a distance of 800 km. The branch has obtained a Road Rater for pavement testing. This sophisticated equipment is being evaluated and procedures are being developed for British Columbia conditions. It is anticipated that it will increase the efficiency of pavement evaluations.

Applications of Research

An indepth study of methods and materials for minimizing frost and water damage to pavements is being conducted by the special project group.

Field work on the evaluation of the Fort St. John sulphur asphalt test section was completed.

REPORT OF THE DIRECTOR OF BRIDGE ENGINEERING

L. C. Johnson, P.Eng.

A total of $34,500,000 was expended on bridges and ferry terminals during the year. The following reports of the Senior Bridge Design Engineer, the Bridge Construction Engineer, and the Dock Engineer provide details of the Branch's activities.

During 1981/82 "The Bridge of 23 Camels" was completed over the Fraser River at Lillooet with the consequent closing of the timber suspension bridge that had serviced so well since 1910, and the elegant McPhee Bridge over the St. Mary River near Cranbrook was opened. Other highlights in bridge activity were the construction work on Petitot River Bridge south of Fort Nelson, with the structure virtually complete and ready for traffic; continued construction of Colony Farm Overhead near Coquitlam, and continued construction of structures on the relocated Revelstoke–Mica Highway.

Good progress was made on preliminary designs in both steel and concrete for the proposed Annacis Island Bridge main span. In addition to the structural design, an extensive geotechnical, geophysical and seismic testing program, plus wind-tunnel and hydraulic model testing, were carried out.

By the year's end, the design of the proposed structure for Annacis Channel, which embodies a swing span and which will carry both highway and railroad traffic, was nearing completion.

In conjunction with the Design and Surveys Branch and the Geotechnical Branch, work continued on the conceptual designs for the many structures proposed for the Annacis Island Crossing complex.

The major accomplishment of the Dock section was the completion of upper level loading ramps for one berth at both Swartz Bay and Tsawwassen Ferry Terminals, and the commencement of similar work at a second berth at both terminals.

Bridge Design

Design work proceeded on bridges throughout the Province. Details of the program follow:

	Design in Progress	Design Completed	Tender Called
Annacis Complex			
Annacis Island Swing Span	X		
Annacis Island Bridge	X		
Trans-Canada Highway			
Bush Creek Widening	X		
Koksilah Underpass	X		
Campbell Creek Overheads	X		
Yellowhead Highway			
Kasiks Overhead		X	
Slickenslide Creek			X
Polymar Creek			X
Snowbound Creek			X
Southern Trans-Provincial			
Nicolum Creek			X
Eleven Mile Creek			X
Revelstoke–Mica			
Downie Creek			X
La Forme Creek		X	X
Carnes Creek		X	X
Mars Creek		X	X
Island Highway			
Nanoose Creek Modifications		X	X
Bonnell Creek Modifications		X	X
Cluxewe Creek		X	(1)
Keogh Creek	X		
Highway 37A			
Cullen Creek	X		
Tumbler Ridge Access			
Dickebusch Creek			X
Twidwell Bend		X	X
Bullmoose Flats		X	X
Bullmoose Creek		X	X
Wolverine Creek		X	
Murray River		X	X
Flatbed Creek		X	
Region 1—Miscellaneous			
Pattullo Bridge Repair	X		
"M" Creek Bridge		X	X
Cape Horn Flyover	X		
Culliton Creek		X	X
Nicomekl River, Highway 15	X		
Middle Arm Repair	X		
Marine Way Pedestrian Overhead	X		
Sunset Creek	X		
Red Bridge, Lillooet River	X		
Cheakamus River (Cheekeye)		X	

(1) Day labour.

	Design in Progress	Design Completed	Tender Called
Region 1—Miscellaneous—Continued			
Golden Dreams Bridge		X	(1)
Bridge Road Underpass	X		
Upper 19 Mile Creek		X	
McKay Creek		X	X
Seymour Parkway	X		
Grantham Bridge	X		
Region 2—Miscellaneous			
Kelowna Bridge Cables	X		
Kelowna Bridge Widening	X		
Enderby Bridge	X		
Clearwater Town		X	X
Mission Creek Sidewalk		X	X
Penticton Parkway Underpass	X		
Kaiser Bridge	X		
Region 3—Miscellaneous			
Trail C.P.R. Underpass	X		
Trail Pipeline	X		
Michel Prairie Bridge	X		
Wilson Bridge		X	X
Michel Creek	X		
Elkford Spur	X		
Sparwood Overhead	X		
Vallican Bridge	X		
Old Revelstoke Redecking	X		
Passmore Bridge	X		
Slocan Park	X		
Asher Creek	X		
Nelson Waterfront	X		
Silver King Creek	X		
Region 4—Miscellaneous			
Angusmac Creek	X		
Red Rocky Creek	X		
Nechako River, Foothills Road	X		
C.N.R. Underpass, Foothills Road	X		
Otway Road Underpass	X		
Vanderhoof West Bridge			X
Vanderhoof West Overhead			X
Baker Creek		X	X
Nygaard Bridge	X		
Willis Bridge	X		
Thorsen Creek	X		
Nautley River Bridge	X		
Port Nelson River Bridge	X		
Region 5—Miscellaneous			
Greenville Bridge		X	X
Walcott Foot Bridge Repair	X		
Ridley Island Overhead			X
Region 6—Miscellaneous			
Meade Creek Bridge Repair		X	X
Interurban Road Overpass	X		
Wain Road Pedestrian Overpass	X		
Buttle Lake Narrows	X		
Marble River Bridge	X		

(1) Day labour.

Bridge Construction

In the 1981/82 fiscal year, 15 new vehicular bridges and a pedestrian overpass were completed, and sidewalks were added to three bridges. On March 31, 1982, 17 bridges were under construction.

Opening ceremonies were conducted in June and July respectively for the Courtenay River Bridge in Courtenay, and the Bridge of the 23 Camels in Lillooet. These bridges will improve highway traffic to and through these communities. The Courtenay River Bridge includes a bascule (vertical swing) span to allow for passage of boats.

McLarry Bridge, across the Cottonwood River east of Quesnel, was opened to traffic November 1981. This structure experienced heavy logging traffic for some time because of heavy cutting of timber threatened by the spruce beetle.

The Petitot River Bridge on the Fort Nelson-Fort Simpson Highway near the North West Territories border was completed, meeting a tight schedule at a remote location.

A small structure over the Canadian National Railway was opened in February to provide access to the port development on Ridley Island near Prince Rupert.

The contractor installed 36″ diameter steel pipe caissons by churn-drilling to form the piers of Clearwater Town Bridge. This method of construction was used because of anticipated difficulty in the installation of conventional piling through a heavy layer of boulders.

Work is well under way on the Colony Farm Overhead, a key structure in the Mary Hill Bypass, which will route Lougheed Highway through traffic around Port Coquitlam. By March 31, the contractor had driven 12 300 m of steel piling and cast about 4 500 m^3 of concrete.

Work has started on Dickebusch Creek Bridge and Twidwell Bend Bridge, the first of several proposed bridges on the Northeast Development Road south of Chetwynd.

Labour relations were good throughout the year, with no strikes among bridge construction workers. In general, the safety record was good, but it was tragically marred in October when an iron worker fell to his death from the Mars Creek Bridge.

During the fiscal year, some 900 tonnes of bridge steel were fabricated and about 2 800 tonnes were erected. In addition, about 1 400 tonnes of steel were fabricated for ferry terminal structures.

In the field of prestressed concrete, some 2 000 m of I beams and 3 800 m of box beams were fabricated. Also fabricated were 1 000 m^2 of deck slabs, wall panels and stair slabs. Perhaps the most interesting was the fabrication of 660 m of straight pretensioned and 470 m of curved post-tensioned trapezoidal box girders for the Colony Farm Overhead.

The bridge resurfacing operation placed 14 500 m^2 of overlay on 17 bridges. The spring program consisted of six bridges on Highway 1 between Hope and Cache Creek. During the summer, at the request of Region 4, the crew replaced curbs, railings, and in one case a sidewalk on three bridges near Quesnel. In the fall, three bridges on the Monashee Highway were resurfaced. Concrete for Highway 1 and Monashee Highway bridges, which are remote from sources of ready-mix concrete, was produced by mobile mixers at the sites.

BRIDGES CONSTRUCTED OR IMPROVED, 1981/82

No.	Name	Location	Electoral District	Type, Description of Work and Remarks
409	Bear River Bridge No. 1	Stewart-Cassiar Highway 37A	Atlin	A 111 m long continuous steel girder bridge with a concrete pier and abutments on steel piles and having a 9.75 m roadway.
516	McLarry Bridge	Barkerville Highway	Cariboo	A 102 m three span continuous prestressed concrete stringer bridge consisting of three 34 m spans supported on concrete substructure and having a 9.75 m roadway.
2743	Davie St. Ped. O/P	Davie Street	Cariboo	A reinforced concrete footbridge with a 13 m precast main span and two double helix approach ramps with reinforced concrete substructure.
2701	Courtenay River Bridge	17th Street	Comox	A 88.4 long bridge consisting of two prestressed concrete stringer spans and a steel bascule span, including piers, abutment and counterweight chamber on steel H-pilings. Roadway width is 16.76 m with two 1.5 m sidewalks.
1640	Nanoose O/H Duplicate	Island Highway	Comox	A three span steel girder bridge 65.5 m long with piers and abutments on steel H-piles.
1289	Cowichan River Bridge	Trans-Canada Highway	Cowichan-Malahat	Fabrication and erection of new steelwork and the removal and modification of existing steelwork on the structure which carries southbound traffic.
2619	Westbridge Sidewalk	Kelowna Highway 33 Rock Creek	Grand Forks	Addition of a 1.4 m wide sidewalk to an existing 45.7 m steel truss and construction of two reinforced concrete retaining walls 1.8 m long.
299	North Fernie Bridge	Highway 3	Kootenay	Supply and install a 107 m steel and timber sidewalk to the outside of the existing trusses.
2623	McPhee Bridge	Kimberley Highway	Kootenay	A 274 m four span continuous twin steel trapezoidal box girder bridge consisting of two 76 m spans and two 61 m spans supported on a reinforced concrete substructure and having width of 8.5 m.
2616	Petitot River Bridge	Fort Nelson–Fort Simpson Highway	North Peace River	A 209 m five span prestressed concrete stringer bridge, supported by two abutments on spread footings and four piers founded on steel H-piling and having an 8.5 m roadway.

1246	Bonell Creek Bridge Modifications	Island Highway	Comox	A three span bridge 33 m long modified by removing the superstructure, extending the piers and abutments and installing prestressed concrete box stringers and a concrete overlay.
1247	Nanoose Creek Bridge Modifications	Island Highway	Comox	A three span 29.3 m long bridge, modified by demolishing the deck and reinforced concrete stringers, extending the piers and abutments to accept new prestressed concrete box stringers and a concrete overlay.
1640	Nanoose Overhead	Island Highway	Comox	Modifications to an existing five span steel girder bridge 68.3 m long. Roadway width is 9.1 m, width one 1.5 m sidewalk.
2664	Colony Farm Bridge	Cape Horn to Pitt River Highway	Coquitlam-Moody	A prestressed concrete stringer bridge 110 m long, 18.3 m wide with a reinforced concrete deck and twin ramps consisting of: 6 spans totalling 203 m of curved, precast, post-tensioned concrete box girders; 10 spans totalling 2 780 m of prestressed trapezoidal concrete girders; 26 spans totalling 368 of reinforced concrete piers and abutments founded on steel pilings.
1382	Meade Creek Bridge	Youbou Road	Cowichan-Malahat	Demolish and remove collapsed abutment. Reconstruct new abutment and repair existing deck, curbs and fence posts.
7791	Clearwater Town Bridge	Old North Thompson Highway	Kamloops	A three span 105 m prestressed concrete girder bridge with a reinforced concrete deck all supported by two concrete abutments and two piers built on extended large diameter pipe piles.
779	Wilson Creek Bridge	Elk Valley Road	Kootenay	A three span prestressed concrete box stringer bridge 46 m long with steel pipe pile and concrete cap bents for abutments and piers.
2708	Vanderhoof West Bridge	Highway 27	Omineca	A three span plate girder bridge 188 m long with piers and abutments on steel H-piling.
2709	Vanderhoof West O/H	Highway 27	Omineca	A three span prestressed concrete box stringer bridge 37.7 m long with piers and abutments on steel H-pilings.

BRIDGES CONSTRUCTED OR IMPROVED, 1981/82—*Continued*

No.	Name	Location	Electoral District	Type, Description of Work and Remarks
1534	Carnes Creek Bridge	Mica Highway	Shuswap-Revelstoke	A 225 m four span continuous steel plate girder bridge consisting of two symmetrical cantilever spans, one 40 m central suspended span and one 40 m end span supported on two reinforced concrete abutments and three reinforced concrete piers on prestressed pedestals excavated into rock and having a roadway width of 9.5 m.
2697	LaForme Creek Bridge	Revelstoke-Mica Highway	Shuswap-Revelstoke	A 220 m continuous steel plate (curved) girder bridge consisting of two 63 m and two 47 m spans with a concrete deck, 9.5 m roadway, and supported on reinforced concrete substructure.
1430	Mars Creek Bridge	Highway 23 Relocation	Shuswap-Revelstoke	A 174 m bridge consisting of seven structural steel spans of different lengths. Six of the spans, including a 61 m truss, will be salvaged from the existing Holdich Creek Bridge and reused. A new 45 m span has been added. The structure is supported on reinforced concrete piers and abutments with spread footings. The roadway is 8.5 m.
2235	Polymar Creek Bridge	Yellowhead Highway 16	Skeena	A three span prestressed concrete box stringer bridge 28.7 m long with steel pipe pile and concrete cap bents for abutments and piers.
6714	Slickenside Creek Bridge	Yellowhead Highway 16	Skeena	A two span prestressed concrete box stringer bridge 19 m long with steel pipe pile and concrete cap bents for abutments and pier.
2236	Snowbound Creek Bridge	Yellowhead Highway 16	Skeena	A two span prestressed concrete box stringer bridge 19 m long with steel pipe pile and concrete cap bent for abutments and pier.
2675	Dickebusch Creek Bridge	Northeast Development Road	South Peace River	A single span, 36.5 m long steel girder bridge with a reinforced concrete deck supported on reinforced concrete abutments.
2268	Twidwell Bend Bridge	Northeast Development Road	South Peace River	A four equal span steel plate girder bridge 158.5 m long with piers and abutments on steel H-piling.

1209	Eleven Mile Creek	Southern Trans-Provincial Highway	Yale-Lillooet	A 9 m span widened to 20.1 m by removing the steel and concrete superstructure, extending the abutments and supply and installation of a concrete overlaid prestressed concrete box stringer deck system.
1208	Nicolum Creek Bridge	Southern Trans-Provincial Highway	Yale-Lillooet	A 18.3 m span widened to 18.9 m by removing the existing steel and concrete superstructure extending the concrete abutments and installing a concrete overlaid prestressed concrete box deck system.
1324	Mission Creek Bridge	K.L.O. Road	Okanagan South	Remove curb and fence and supply and install new sidewalk on downstream side of existing 43 m bridge.
2437	C.N.R. Overhead	Prince Rupert–Ridley Island Highway	Prince Rupert	A 32 m long single span prestressed concrete bridge on reinforced concrete abutments and with a 9.2 m wide reinforced concrete deck.
1095	Bigmouth Creek Bridge	Revelstoke-Mica Highway	Shuswap-Revelstoke	A 90.35 m three span prestressed concrete stringer bridge consisting of one 30 m main span and two approach spans 30.1 m and 30.25 m, supported on a reinforced concrete substructure and having a roadway width of 9.5 m.
1024	Lean-To Creek Bridge	Kalum Lake Road	Skeena	A 42.5 m long three span prestressed concrete box stringer bridge with 8.5 m wide deck and piers and abutments on spread footings.
6503	Kettle River Bridge	Monashee Highway 6	Vernon	A single span, prestressed concrete stringer bridge supported by reinforced concrete abutments on steel piles and having a 10 m roadway.
221	Bridge of the 23 Camels	Lillooet Access Road	Yale-Lillooet	A 341.5 m bridge consisting of two 48.8 m spans simply supported and three (73.2 m, 97.5 m, 73.2 m) continuous welded steel spans with a 8.5 m roadway and one 2.1 m sidewalk. The substructure consists of four reinforced concrete abutments with riprap protection.
2265	Pavilion Overhead	Cache Creek Highway	Yale-Lillooet	A 74 m three span prestressed concrete stringer bridge consisting of three 24.7 m spans supported on a reinforced concrete substructure and having a roadway width of 8.5 m.

DOCK DESIGN, CONSTRUCTION AND MAINTENANCE

Design

The following design works have been completed or are in progress:

A. BRITISH COLUMBIA FERRY CORPORATION PROJECTS

T.F.M. 198 Deas Maintenance Facility—Revisions to existing machine shop. Design completed.

T.F.M. 215 Langdale Ferry Terminal—Double decking of berths and expansion of holding compound. Design in progress.

T.F.M. 225 Horseshoe Bay Ferry Terminal—Double level loading for Berths No. 2 and 3 complete with transfer structure. Design in progress.

B. MINISTRY OF TRANSPORTATION AND HIGHWAY PROJECTS

B-1057 Quathiaski Cove Ferry Terminal—Rebuilding of the berth to accommodate a larger ferry and a double lane loading ramp. Design completed.

Nanaimo Ferry Terminal—Provision of new second berth plus enlarged holding compound. Design in progress.

Gabriola Ferry Terminal—Expansion to holding area and parking lots. Design in progress.

Construction

The following works have been completed or are in progress:

A. BRITISH COLUMBIA FERRY CORPORATION PROJECTS

T.F.M. 141 Prince Rupert Ferry Terminal—A new berth at the existing terminal to eliminate sharing of existing Federal Government berth with State of Alaska ferries. Construction completed.

T.F.M. 143 Departure Bay Ferry Terminal—A new third berth, enlarged fill area, coffee shop waiting room and foot passenger drop-off area. Building and Berth No. 3 construction in progress, other works completed.

T.F.M. 188 Vesuvius Ferry Terminal—Construction of holding compound to alleviate problems with overflow parking. Construction completed.

T.F.M. 191 Village Bay Ferry Terminal—New second berth to accommodate expanded service to the Gulf Islands. Construction in progress.

T.F.M. 192 Tsawwassen Ferry Terminal—Double level loading for Berth No. 3, including foot passenger loading ramp. Construction completed. Foot passenger walkways to connect Berth No. 3 to the existing walkway. Construction in progress. Transfer deck for auto traffic joining Berths No. 3 and 4. Construction in progress.

T.F.M. 194 Swartz Bay Ferry Terminal—Double level loading for Berth No. 1, including revisions to foot passenger walkways. Construction completed.

T.F.M. 198 Deas Maintenance Facility—New paint shop and stores building. Construction completed.

T.F.M. 210 Tsawwassen Ferry Terminal—Double level loading ramp and foot passenger loading tower for Berth No. 4. Construction in progress.

T.F.M. 211 Departure Bay Ferry Terminal—Addition to catering stores building. Construction completed.

T.F.M. 214 Swartz Bay Ferry Terminal—Double level loading for Berth No. 2, including revisions to foot passenger walkway. Construction in progress.

M-216 Tsawwassen Ferry Terminal—Relocation and renovations to Old Hull Maintenance Building to create test kitchen facilities. Construction in progress.

T.F.M. 218 Langdale and Saltery Bay Ferry Terminals—Provisions of emergency electrical generators at each terminal. Construction in progress.

B. MINISTRY OF TRANSPORTATION AND HIGHWAYS PROJECTS

B-1389 Blubber Bay Ferry Terminal—Revisions to approach road to loading ramp and enlarged parking area. Construction completed.

B-1391 Campbell River Ferry Terminal—Two new berths and enlarged holding compound. Dredging in progress.

Maintenance

In addition to the above operations, numerous maintenance projects as well as normal maintenance operations were carried out at all British Columbia Ferry Corporation Terminals and Ministry of Transportation and Highways Ferry Terminals under this jurisdiction.

REPORT OF DIRECTOR OF TRAFFIC ENGINEERING

H. F. Coupe, P.Eng.

During 1981/82 traffic activity continued at a high level in the Province although the rate of increase in the number of vehicles using British Columbia highways was slightly less than in previous years. The Traffic Engineering Branch cooperated with individuals and organizations in the associated field of traffic safety, traffic planning, standardization of traffic control devices and traffic operations.

The Director of Traffic Engineering represented the Ministry on the British Columbia Safety Council, the St. John Ambulance Highway First Aid Committee, the Roads and Transportation Association Council on Uniform Traffic Control Devices for Canada and the Roads and Transportation Association Committee on Traffic Operations.

Short duration annual traffic counts were taken with automatic equipment at approximately 720 locations throughout the Province. All short counts taken on Vancouver Island and in the Fraser Valley recorded traffic volumes separately for each direction of travel. Traffic volumes were recorded continuously throughout the year at 27 additional locations and 15 of these recorders counted traffic separately for each direction. A further 130 automatic counts were taken for special purposes such as railway crossing, intersection and planning studies.

Punched tape traffic counters are used almost exclusively so that calculation of traffic count information can be done with data processing equipment. A translotar machine located in the Ministry computer room is used to transfer information from punched tapes to computer cards.

In the summer of 1981, the Branch began to install electronic loop detection systems at regular short duration traffic count stations on high speed/high volume highways. The new detectors, replacing the rubber road tubes previously used, allow employees to set up counts on the shoulder without having to venture onto the travelled lanes. Over 1,090 "loops" have already been installed at approximately 375 count stations throughout the Province. The program will be continued this summer.

Summer daily traffic volumes for 1981 showed approximately 62,000 vehicles on First Narrows Bridge; 73,000 vehicles on Port Mann Bridge; 70,000 vehicles on Oak Street Bridge; 55,000 vehicles on Knight Street Bridge; 67,000 vehicles on Pattullo Bridge and 72,000 vehicles in the George Massey Tunnel. Data from the permanent count stations showed increases in 1981 over 1980 of approximately 5 per cent in the Southern Interior; 5 per cent on Vancouver Island; 1 per cent in the Lower Mainland and 3 per cent in the Northern Interior.

During the year, horizontal curves on almost 3 200 km of Provincial highway were checked for the correct advisory speed. Where necessary, it was recommended that appropriate curve and advisory speed tab sign assemblies be made up, revised or removed.

Numerous intersection problems were investigated during the year. Many vehicle turning movement counts were taken manually and designs prepared for improvements at approximately 35 intersections and median island projects. Improvements such as widening, chanelization, signing and signal revisions were carried out at many of these intersections to give greater capacity, to reduce hazards and delay and to facilitate the flow of traffic. There has been a continuing increase in traffic problems referred to the Branch and in requests for signs, flashing beacons, crosswalks and overhead pedestrian crossings.

Many highway design plans were reviewed to ensure that intersections and interchanges would function with as few operational and capacity problems as possible.

Seven railway grade crossings were signalized in cooperation with the Canadian Transport Committee and the railways.

Changing conditions necessitated reviews of many speed limits throughout the Province. The Ministry obtained the opinions of police forces in many cases, and where necessary, travel speeds were checked with radar.

A very heavy electrical design program including ferry terminals, major construction projects, street lighting and traffic signals was up 21 per cent at the end of 1981 over that of the previous year.

New traffic signals were installed at 45 intersections and pedestrian signals were installed at seven other locations in the Province. Upgrading of traffic control equipment was carried out at 14 intersections and two old one-way bridges had new equipment installed.

The older moduvac traffic controllers have now been removed from Regions 3 and 4 and next year the last three will be removed from Region 2.

Intensive one-week training seminars were put on at the traffic signal shop covering the new microprocessor controlled solid state traffic controllers, and seven Highway electricians benefitted from this program.

Energy conservation was the primary design consideration again this year in the electrical section, with more than 1,800 new sodium street lights being installed.

A program to change our existing fluorescent and mercury lighting units was instituted. By the end of 1981 all fluorescent roadway lighting luminaires had been removed from the Highways lighting system, in the Lower Mainland with the exception of the Port Mann Bridge.

On energy short Vancouver Island, all street lighting has now been completely changed over to high pressure sodium lighting with removal this year of the last 427, 400-watt mercury luminaires. This change out to high pressure sodium will cut electrical consumption on the Islands by 444,000 kWh/year. In the rest of the Province, a further 475 mercury units were withdrawn from service and replaced with 150 watt high pressure sodium. One more year should complete the change over to sodium in Regions 3, 4 and 5.

In Region 1, sodium lighting was installed, along with a new electrical system, on the Pattullo Bridge replacing original equipment that was no longer reliable. Next year, the north approach lighting to this Bridge should be upgraded.

REPORT OF HIGHWAY SAFETY ENGINEER

J. Lisman, P.Eng.

During the year, the work of the Branch shifted toward a more systematic appraisal of accident locations. Previous reports have dealt with the development of the Highway Safety Improvements Program, a computer technique for analysing traffic accident data recorded at specific locations on the Provincial highway network. This program finally started to produce results in the summer, and during the year much work was done to transform the computer output into simple layouts which could be used by other people in the Ministry engaged in road planning and highway design. The data now assists us in diagnosing the practical problems at suspect locations on the highway network, and is being incorporated into deciding the need for traffic signals at intersections. The next logical step is to integrate this information with other factors in determining capital project priorities, and this will be done when staff become available.

Work continued as in previous years, to encourage the "Safe Route to School" process to determine what physical treatments were needed on the approach roads towards rural and suburban Elementary Schools. Using the information available from school principals it was easy to discern the numbers of children walking to school from various directions, and to provide physical improvements to shoulders and crosswalks to make their journeys safer. This was also the second year of a School Route Improvement Program in which specific upgrading treatments were carried out at 22 locations throughout the Province. While parental apprehensions concerning the safety of young children walking to school remains understandably high, the program enables these to be answered in a factual manner with fewer delays.

Both the above programs have increased the capabilities of the Branch and the amount of routine work being carried out. New auxiliary staff were trained, and a future Branch staffing structure, to carry out the analysis and engineering implementation work, was submitted for Treasury Board approval.

Design of the new "family" of concrete traffic barriers continued, adapting the safety shape which was developed in the U.S. to deflect smaller vehicles. Good reports have been received about the first installation of the new shape median barrier on Highway 99, from the Massey Tunnel up to No. 5 Interchange. No deaths or serious injury cases have been reported from accidents involving the new barrier, and the marks and scrapes along it indicates that it is successfully redirecting vehicles. In addition to this, changes were made to the standard requirements for placing guardrail to give increased protection to drivers from water hazard, the Skeena River being the best example.

The analysis of accident locations show, not surprisingly, that a large percentage of accidents in urban and suburban areas occur at intersections. Realizing that intersections comprise a small fraction of the actual roadway area in British Columbia, this suggests that remedial actions focused on intersections should produce accident reduction. Police experience also suggests that drivers are not complying as strictly as they should with the amber and red light phases of traffic signals, and that this deterioration is responsible for some of the increase in serious accidents at intersections. Recognizing this, a project was initiated by a member of the R.C.M.P. to take pictures of vehicles violating signals, and the technical feasibility was considered in the Ministry. Further work continued to develop a system which could produce evidence to satisfy the courts, and a pilot introduction was installed during the spring of 1982 at Vernon.

If this technique turns out to be successful it may be applied at signalized problem intersections throughout the Province to reduce the accident rate. Several other applications of similar photographic recording technology have been used in European countries, but not all are suitable or applicable to British Columbian circumstances. However, experiments of the kind will be considered wherever an accident reduction appears predictable.

Although the serious accident rate on the Squamish Highway from Vancouver toward Whistler had shown considerable improvement—possibly as a consequence of certain safety works which had been carried out in the previous two years—the tragedy at M Creek Bridge focused attention again on the physical limitations of the route. Beyond replacing the wooden bridges which are vulnerable to the washouts and which recent experience shows can occur along Howe Sound, further work was planned to increase the night-time delineation of the highway by installing shoulder reflectors and cats-eye type markers along the highway centreline.

The work of the B.C. School Traffic Safety Policy Committee, which has produced Teacher's Guides for use in the schools, was brought to an end with the introduction of a major traffic safety educational program at the school level by I.C.B.C.

At the national level, co-operative meetings were held with other Provincial and Federal officials, producing policies which were adopted or confirmed by the provincial ministers at their annual meeting in September. Among these were: Improved effectiveness of traffic law enforcement; promotion of traffic safety education within the school system; campaigns to increase seat belt wearing rates; confirmation of highway safety engineering techniques in accident education; adoption of a uniform national system for reporting traffic accidents.

Funds were spent on the following list of projects during the fiscal year:

Project Name	Sub-projects Complete, or in Hand	Expenditure
Roadside Hazard Elimination	6	$ 93,959.58
Intersection Improvements	1	35,674.00
School Route Improvements	22	291,779.83
General Safety Works	5	19,432.00
Demonstration	1	1,055.00
Kilometre Reference Markers	-	131.52
Road Safety Education	-	1,394.23
General Expenses	—	35,705.93
Total		$479,132.09

REPORT OF THE DIRECTOR OF PLANNING

D. R. Parkes, P.Eng.

During 1981, a reorganization of the Planning Branch was completed and the functions assigned under six sections. Progress is being made toward necessary staffing. The Computer Systems section has been particularly active, and a network of computer facilities has now been brought on line. Further, the General Ledger System is now operational and is providing useful results. The other sections continue to show increased activities, as compared with previous years.

Highway Planning Section

The primary function of this section is to develop comprehensive road transportation network plans, strategies and functional layouts in order to provide for short and long term solutions to transportation problems for metropolitan, urban, regional and rural areas. This work was continued from the previous year in 56 communities and a further 35 were initiated during 1981. By the end of 1981, technical agreement and, in most cases, municipal council and regional board endorsements have been achieved in 21 network studies.

The purpose of these studies is to identify the physical and land use limitations for transportation corridors prior to urban development and redevelopment so that feasible, effective and widely accepted corridors can be protected and acquired and facilities built at minimum cost and with the least possible disruption to communities. Local jurisdictions were encouraged to adopt these network strategies as the transportation component of their official community plans and official settlement plans. The strategies are an important element in the assessment of applications from Municipalities seeking Provincial cost sharing funds, under either the *Revenue Sharing Act* or the Secondary Highways Program. This planning work also provides guidance to the Approving Officers from both the Municipal and Provincial levels and gives a framework for decisions concerning zoning, subdivisions, access and the traffic impacts and internal layout of major land developments. This year the Highway Planning Section undertook several major functional corridor studies throughout the Province. These projects were in response to individual and unique problems in various areas of the Province. A sample of these special projects is as follows:

1. Kensington-Sperling Overpass in Burnaby
2. Highway 11 relocation in Abbotsford-Matsqui
3. Annacis System
   —Westminster Highway alignment
   —Queensborough bridgehead
   —British Columbia Hydro corridor study
4. Inland Island Highway Study
5. Nanaimo Bypass Study
6. Island Highway Upgrading Study
7. Patricia Bay Highway Analysis
8. Railway Separation along Highway 16 (Burns Lake, Vanderhoof)
9. Cranbrook Railway Separation Location Study.

Annacis System Section

The main bridge location and highway alignments both north and south of the Fraser River have been established and final design assignments have been awarded. Mapping, for highway design purposes, is now available and a major portion of the route survey and geotechnical investigations have been completed.

South of the Fraser River the design assignment for 8.5 km of highway, four grade separated interchanges, and one major at-grade intersection is nearing completion. This assignment included a multi-disciplinary environmental impact assessment of the alignment resulting in mitigation and enchancement strategies being incorporated into the engineering design. The Province and the Municipality of Delta are co-operating on an evaluation intended to assist in the resolution of connections between the Annacis Highway and major municipal roads.

The main Fraser River bridge, a 440 metre cable-stayed structure, is currently under design in both steel and concrete alternates. The foundation investigation and river hydraulic model work has been completed. The structure design drawings are expected to be finalized by the end of 1982. The structure design is for an initial four traffic lanes with potential for expansion to six traffic lanes or the addition of light rail transit.

North of the main bridge, 7.4 km of highway and connecting roads are currently under design. This assignment includes three major interchanges and a fixed bridge over Annacis Channel. The conceptual design work has been completed and the detailed design work and contract drawings are scheduled for completion by mid-1982.

The Annacis System will also include an arterial road around the outside of the Queensborough residential area. This facility will connect the Queensborough Bridge to a swing span bridge across the Annacis Channel to Annacis Island. Both the bridge design and road design will be completed by Spring 1982.

At the north end of the Queensborough Bridge major improvements to the road system are required to accommodate traffic growth that will result from both the Marine Way and Annacis projects. A series of alternative configurations have been investigated and presented to the City of New Westminster. It is anticipated that a decision in early 1982 will lead to initiation of facility design by mid-1982.

A four-lane east/west highway through Richmond will be required for existing traffic growth trends and as part of the Annacis System. The Ministry, Municipality of Richmond, and representatives of the agricultural community have evaluated a series of alternatives including both widening of the existing Westminster Highway and new alignments. A final decision on alignment is expected in the Spring of 1982 with an immediate start on highway design.

The Ministry's Property Services Branch has acquired significant portions of the required right of way through New Westminster, Richmond, and Delta.

Construction work has been completed on the relocation of a British Columbia Hydro gas pipeline to eliminate a conflict with the Annacis System. An initial dredging contract, providing stockpiles totalling 1.3 million cubic metres of Fraser River sand, has been completed and a second dredging contract is being prepared. A 3 km work road has been built along the highway alignment through the bog area in Delta to assist work access along the route. Construction work has commenced on the abutments and approach embankments for the Annacis Channel swing bridge.

Investigation Analysis System

The roadside interview information system which provides analysis of travellers' origins, destinations and trip purposes is substantially complete. The system has allowed a preliminary analysis of average trip length frequencies in a highway classification study. A computerized travel survey inventory system which records all surveys from the design to report stages and provides for information retrieval continues to provide a short response time to user requests for data.

In 1981, a new system for analyzing data obtained in Licence Plate Surveys was implemented. This system provides a graphical analysis of vehicle flow patterns through population centres or along highway links. A revised vehicle occupancy system provides data on the numbers of vehicles and persons using the major roads in the urban centres during peak traffic hours. Preliminary work on a system that would save considerable field work by inferring all turning movements at intersections through the use of mechanical traffic counters proved successful.

New travel data collection continued in 1981, including the following:

1. Licence plate surveys were conducted in 27 areas, requiring 268 person days, or 18 per cent of the survey effort. These studies provide valuable information on travel routes and travel times in local areas without requiring any intervention in the normal flow of traffic.
2. Vehicle occupancy counts which monitor urban travel trends and the role of public transit were allocated 262 person days or 18 per cent of the program.
3. Counts of vehicle movements at intersections were made in 39 communities for a total of 427 person days (29 per cent). These counts are used in intersection capacity calculations which assist in setting priorities for improvements such as traffic control or new laning.
4. Roadside interviews were conducted at 14 sites, requiring 193 person days or 13 per cent of the survey progam. These studies permit forecasting of travel patterns in the event of changes to the inter-city network and allow monitoring of the level of recreational or tourist travel.
5. Classifications of vehicles by different body types were done at 27 sites requiring 160 person days (11 per cent). The results are used in highway capacity and laning studies and in the determination of new truck weigh scale locations.

The remaining time of the summer program was required for training, travel and setting up.

For the first time, surveys were conducted at five ski resorts in the winter of 1981/82. Eighty-four person days from the office staff were used in vehicle classification and occupancy counts, interviews of day skiers, and questionnaire distribution to condominium and chalet occupants. These surveys are designed to measure volumes and peak traffic conditions, the origin and mode of travel of the day skiers, and the relationship of accommodation use to vehicle parking needs at these popular attractions.

Municipal Programs Section

During the 1981/82 fiscal year the Municipal Programs Section dealt with a wide variety of subjects pertaining to classified highways and major municipal roads located within organized territory. Funds in the amount of $2,206,418 were approved for Secondary Highway capital works and $334,541 for Secondary Highway maintenance works. Discussions were carried out with 31 municipalities concerning cost sharing work on urban street renewal and bridge assistance under section 32 (3) of the *Highway Act*. A large number of changes in classification was considered with 34 Arterial Highways rescinded and 52 new Arterials being established. Seven Secondary Highways were rescinded and seven were established.

Detailed analysis was carried out and recommendations made to the Ministry of Municipal Affairs with regard to 210 municipal applications for cost sharing under the *Revenue Sharing Act* for works on major municipal highways.

This section also provided the Ministry of Municipal Affairs with comments and recommendations regarding 41 proposed boundary extensions, restructures and new incorporations.

Computer Systems Section

The past year saw the establishment of the office of the Computer Systems Coordinator to manage data processing for the Highway Operations and Administration Departments of the Ministry. The Coordinator serves as the interface to the British Columbia Systems Corporation and provides strategic planning, financial control, contract administration and educational recommendations to management.

A number of new information systems were installed during the year. Finance Branch began operation of the General Ledger System (GLADIS) on April 1st as the first of many Ministries to form a financial systems network of mini computers. A Ferry Management Information System was put in place to provide statistics on vessel usage and traffic on the Ministry ferries, while another information system was initiated to assist in the efficient operation of the Ministry's communications network. A Highway Safety Improvement System was installed to assist in identifying locations showing greater than average numbers of traffic incidents and their associated characteristics. A new system in the Personnel Services Branch allows on-line inquiry of work force files and assists staff in maintaining up-to-date records.

Several of the existing information systems were extended during the year as well. Work was begun on a replacement criteria sub-system to the Equipment Management System to assist in identifying vehicles having higher than acceptable operation or maintenance costs. The Performance Budget Sub-system of the Maintenance Management System was rationalized and extended in order to more closely control expenditures for road maintenance. A number of small systems in the Planning Branch were enhanced to provide more timely information on road use and future requirements.

Many parts of the Ministry were able to benefit from advances in computer hardware. The completion of the distributed data entry network saw the installation of terminals in every District and Regional Office with communication to Headquarters. Solid state devices were tested to send data directly to the computer in both traffic surveys and field surveys for design and construction, either by telephone link or through the terminal network.

Improvements were made in the graphical computing services available to technical and professional staff. The Perspective Plot System in the Design and Surveys Branch allows designers to preview proposed roads from the point of view of either drivers or bystanders. These three dimensional pictures are useful for assessing the impact of new works and for communication with interested lay persons. Graphics terminals were made available to previewing plots and for structural analysis and a digitizer was linked to the main computer to enter graphical data. Sophisticated graphic computers were installed for seismic and rockwork analysis in the Geotechnical and Materials Branch.

Educational courses in computer related subjects were provided to some 40 staff throughout the Ministry. A program of video based self-instruction courses was initiated to reduce the resources and to enhance the availability of new information to Regional and District staff throughout the Province.

Highways Systems and Programs Section

Approximately 13 000 km of major roads were photologged. Film presentations were made on 197 occasions at the request of officials of 12 Headquarters Branches as well as the Executive and representatives of other Ministries and Federal and private agencies. The roughness of approximately 7 000 km of road was recorded and reported.

During the early part of the year, the first iteration of the computer level of traffic service on the primary network was completed and research into the effect of driveway access was commenced. Detailed capacity studies were started on segments of Highways 1, 3, 4 and 97.

Coordination of data processing was transferred to a separate section in July 1981. The function of the Systems and Programs Section in relation to highway capital construction is under review and new procedures for program selection are being developed. An initial procedure for functional classification was developed and presented.

Approving Section

The approval of subdivision of land applications for all rural areas in the Provinces lies with the Ministry and is administrated through 38 District Offices and 6 Regional Offices. The Ministry approved 2,509 subdivision applications which created an additional 9,843 building lots, and approximately 360 km of highway were added to the system through dedication of road by subdivision.

The offices also approved the following applications:

Controlled Access Permits	543
Ordinary Driveway Permits	6,355
Zoning Bylaws Approved	1,350
Other Permits	5,048

Details by Region are provided as in the attached chart:

Regional Summary of Regulatory Activities 1981

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Burnaby	309	63	567	365	611	1,587	33.83	23.830
Kamloops	540	190	2,000	440	1,480	2,320	73.00	101.000
Nelson	389	82	649	51	753	1,191	40.22	48.440
Prince George	389	73	883	170	762	1,391	96.67	92.815
Terrace	110	60	233	47	270	505	30.81	24.970
Nanaimo	772	75	2,023	277	1,172	2,849	82.01	39.740
Totals	2,509	543	6,355	1,350	5,048	9,843	356.54	330.800

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(1) Subdivisions (Finals).
(2) Controlled Access Permits Issued.
(3) Ordinary Access Permits Issued.
(4) Zoning Bylaws Approved.
(5) Other Permits.
(6) Lots Created (Finals).
(7) Kilometres of new road dedicated (Finals).
(8) Hectares of widened right of way to existing highways.

CLASSIFICATION OF HIGHWAYS

(Under Part III of the Highway Act*)*

Statement Showing Highways Classified as at March 31, 1982

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
ABBOTSFORD (D)*	5R	Essendene Avenue & Huntingdon-Mission Highway (West Railway Street)	Arterial	0.80	---
	11R	Huntingdon-Mission Highway	Arterial	0.53	---
	336R	McCallum Road (East Side)	Arterial	0.37	---
	342R	McCallum Road (East Side)	Arterial	1.59	---
	381R	Trans-Canada Highway & Interchanges	Arterial	27.12	---
	402R	Trans-Canada Highway	Arterial	2.01	---
	403R	Huntingdon-Mission Highway	Arterial	4.70	---
	202B	No. 3 Road	Secondary	---	3.06
ALERT BAY (V)	647R	Fir Street	Arterial	2.76	---
ARMSTRONG (C)	270R	Vernon-Sicamous Highway	Arterial	0.84	---
	33B	Armstrong-Salmon Arm Road	Secondary	---	1.45
	272B	Pleasant Valley Road & Smith Drive	Secondary	---	2.82
ASHCROFT (V)	580R	Ashcroft-Cache Creek Highway, 1st St., Barnes Avenue & Highland Valley Road	Arterial	4.26	---
BELCARRA (V)		NIL			
BURNABY (D)	1R	Kingsway	Arterial	6.79	---
	17R	Lougheed Highway	Arterial	9.90	---
	135R	Canada Way (Grandview-Douglas Highway)	Arterial	4.14	---
	272R	Tentn Avenue (north half)	Arterial	2.01	---
	293R	Barnet Highway	Arterial	10.27	---
	376R	Trans-Canada Highway & Interchanges	Arterial	22.90	---
	414R	Simon Fraser University Access Highway	Arterial	3.41	---
	415R	Simon Fraser University Curtis Extension Road	Arterial	0.10	---
	618R	Grandview Highway (Clydesdale)	Arterial	0.09	---
	663R	Gaglardi Way	Arterial	0.96	---
	739R	Marine Way	Arterial	5.80	---
	14B	North Road (west half)	Secondary	---	2.25
	22B	Marine Drive	Secondary	---	5.31
BURNS LAKE (V)	298R	Burns Lake-Babine Road	Arterial	0.85	---
	731R	North Francois Highway	Arterial	0.73	---
	732R	Yellowhead Highway	Arterial	22.80	---
CACHE CREEK (V)	569R	Cariboo Highway	Arterial	0.82	---
	643R	Trans-Canada Highway	Arterial	5.85	---
CAMPBELL RIVER (D)	394R	Island Highway	Arterial	4.25	---
	395R	Campbell River-Gold River Highway	Arterial	5.71	---
	575R	Island Highway (via Discovery Crescent)	Arterial	16.56	---
	188B	Brewster Lake Road	Secondary	---	3.06
CASTLEGAR (C)	452R	Southern Trans-Provincial Highway	Arterial	2.86	---
	626R	Columbia Avenue	Arterial	6.08	---
	261B	Columbia Avenue	Secondary	---	3.91
CENTRAL SAANICH (D)	170R	West Saanich Road	Arterial	7.32	---
	172R	Verdier Avenue	Arterial	1.24	---
	213R	Patricia Bay Highway	Arterial	6.92	---
	121B	Keating Cross Road	Secondary	---	3.22
	216B	Island View Road, Saanich Cross Road & Central Saanich Road	Secondary	---	1.06
CHASE (V)	500R	Trans-Canada Highway	Arterial	1.61	---
	229B	Old Trans-Canada Highway (Chase Business Route)	Secondary	---	2.74
	282B	Pine Street	Secondary	---	0.95

* Key to Municipal Designation - (C) City (D) District (R) Resort (T) Town (V) Village

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length Arterial	Approximate Length Secondary
CHETWYND (V)	675R	John Hart-Peace River Highway	Arterial	3.83	---
	717R	Hudson's Hope Highway	Arterial	2.27	---
CHILLIWACK (D)	8R	Yale Road West	Arterial	10.35	---
	260R	Chilliwack Lake Road	Arterial	1.24	---
	344R	Trans-Canada Highway	Arterial	24.65	---
	345R	Vedder Road and Yale Road West	Arterial	2.93	---
	62B	Vedder Road	Secondary	---	5.25
	106B	Cultus Lake Road	Secondary	---	0.80
	174B	Yale Road East	Secondary	---	11.97
	277B	Vedder Mountain Road, Yarrow Central Road & Dyke Road	Secondary	---	8.14
	280B	Yale Road, Cheam Avenue, Hope Street, First Avenue & Broadway Street	Secondary	---	2.16
	281B	First Avenue & Broadway Street	Secondary	---	1.04
CLINTON (V)	387R	Cariboo Highway	Arterial	2.06	---
	391R	Pavilion-Clinton Road	Arterial	0.55	---
COLDSTREAM (D)	103R	Vernon-Slocan Highway	Arterial	14.48	---
	516R	Okanagan Highway	Arterial	1.69	---
COMOX (T)	257B	Comox Avenue, Stewart Street, Balmoral Avenue & Port Augusta Street	Secondary	---	2.41
	291B	Comox Avenue & Anderton Road	Secondary	---	2.64
COQUITLAM (D)	167R	Brunette Street	Arterial	0.64	---
	553R	Trans-Canada Highway & Interchanges	Arterial	11.67	---
	566R	Lougheed Highway	Arterial	11.76	---
	578R	Barnet Highway	Arterial	1.93	---
	722R	Mary Hill Bypass Interchange	Arterial	1.13	---
	14B	North Road (east half)	Secondary	---	2.25
	115B	Clarke Road	Secondary	---	1.69
COURTENAY (C)	153R	Comox Road	Arterial	1.71	---
	653R	Island Highway	Arterial	4.31	---
	654R	Ryan Road	Arterial	2.72	---
	222B	Eighth Street, Fitzgerald Avenue & Fifth Street	Secondary	---	0.88
	223B	Cumberland Road	Secondary	---	1.74
CRANBROOK (C)	628R	Southern Trans-Provincial Highway	Arterial	6.07	---
CRESTON (T)	718R	Southern Trans-Provincial Highway	Arterial	5.36	---
	275B	Erickson Street, 17th Avenue & 16th Avenue	Secondary	---	2.03
CUMBERLAND (V)	266B	Courtenay-Cumberland Road (Fourth Street & Cumberland Road)	Secondary	---	1.52
	274B	Royston Road-Dunsmuir Avenue -Suttons Road	Secondary	---	2.33
DAWSON CREEK (C)	257R	John Hart-Peace River Highway	Arterial	0.61	---
	363R	Alaska Highway, Alaska Avenue & Dawson Creek-Spirit River Highway	Arterial	5.18	---
	364R	Dawson Creek-Tupper Highway (Eighth St.)	Arterial	2.30	---
	196B	Eighth Street	Secondary	---	1.72
DELTA (D)	349R	Tsawwassen Highway	Arterial	10.35	---
	350R	Point Roberts Highway	Arterial	4.57	---
	352R	Scott Road (west side)	Arterial	7.92	---
	353R	Vancouver-Blaine Highway	Arterial	14.76	---
	530R	Roberts Bank Road	Arterial	5.31	---
	685R	Ladner-Langley Highway	Arterial	13.26	---
	721R	Swenson Road	Arterial	925 m	---
	734R	Annacis Island Highway	Arterial	11.90	---
	735R	River Rd. Connector (Nor Del Interchange)	Arterial	0.61	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
DUNCAN (C)	281R	Trans-Canaday Highway	Arterial	1.21	---
	282R	Trunk Road & Government Street	Arterial	2.01	---
	119B	Tzouhalem Road	Secondary	---	1.09
ELKFORD (V)	729R	Elk Valley Road	Arterial	8.20	---
ENDERBY (C)	36R	Vernon-Sicamous Highway	Arterial	1.79	---
	125B	Cliff Street	Secondary	---	0.26
ESQUIMALT (D)	472R	Craigflower Road	Arterial	2.65	---
	246B	Tillicum Road	Secondary	---	0.53
FERNIE (C)	646R	Southern Trans-Provincial Highway	Arterial	3.80	---
FORT NELSON (V)		NIL			
FORT ST. JAMES (V)	680R	Lakeshore Drive & Resort Hill Road	Arterial	1.45	---
	723R	Vanderhoof-Stuart Lake Highway (Douglas Avenue & Stuart Drive W.) & Germansen Landing Road	Arterial	4.15	---
	738R	Tachie Road	Arterial	4.27	---
FORT ST. JOHN (C)	279R	100 Street (MacKenzie Street)	Arterial	3.43	---
	658R	100 Avenue (Centre Avenue)	Arterial	3.20	---
	682R	Alaska Highway	Arterial	4.41	---
FRASER LAKE (V)	735R	Yellowhead Highway	Arterial	2.68	---
FRUITVALE (V)	202R	Nancy Greene Lake-Rossland-Meadows Hwy.	Arterial	2.98	---
	129B	Columbia Gardens Road	Secondary	---	1.29
GIBSONS (V)	606R	Sunshine Coast Highway	Arterial	2.99	---
	226B	Gower Point Road	Secondary	---	1.95
	227B	North Road	Secondary	---	0.80
GOLDEN (T)	604R	Trans-Canada Highway	Arterial	4.07	---
	639R	Kootenay-Columbia Highway (Golden Bypass)	Arterial	3.40	---
	645R	Kootenay-Columbia Highway	Arterial	2.56	---
GOLD RIVER (V)	677R	Muchalat Drive	Arterial	3.71	---
	678R	Gold River Road	Arterial	1.16	---
GRAND FORKS (C)	464R	Southern Trans-Provincial Highway	Arterial	4.80	---
GRANISLE (V)	527R	Granisle Arterial	Arterial	1.45	---
GREENWOOD (C)	619R	Southern Trans-Provincial Highway	Arterial	3.38	---
HARRISON HOT SPRINGS (V)	161R	Harrison Hot Springs Road and Lillooet Avenue	Arterial	4.25	---
HAZELTON (V)	590R	Hazelton Arterial	Arterial	2.40	---
	597R	Hazelton Access Road	Arterial	1.50	---
HOPE (T)	179R	Southern Trans-Provincial Highway	Arterial	2.65	---
	180R	Trans-Canada Highway	Arterial	1.69	---
	159B	Kawkawa Lake Road	Secondary	---	0.51
	160B	Sixth Avenue	Secondary	---	0.21
HOUSTON (D)	620R	Yellowhead Highway	Arterial	13.39	---
HUDSON'S HOPE (D)	520R	Peace River Canyon Road	Arterial	23.82	---
	521R	Chetwynd-Hudson's Hope-Charlie Lake Hwy.	Arterial	38.70	---
	715R	Beryl Prairie Road	Arterial	12.47	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length Arterial	Approximate Length Secondary
INVERMERE (V)	674R	13th Avenue, 13th Street, 7th Avenue, 5A Street, 7th Street & 3rd Avenue	Arterial	2.69	---
KASLO (V)	450R	Balfour-Kaslo-Galena Bay Highway & Kaslo-New Denver Highway	Arterial	2.99	---
	473R	Balfour-Kaslo-Galena Bay Highway	Arterial	1.19	---
KAMLOOPS (C)	694R	Trans-Canada Highway	Arterial	32.72	---
	696R	Princeton-Kamloops Highway	Arterial	5.67	---
	716R	Yellowhead South Highway	Arterial	12.59	---
	725R	Summit Drive, Victoria Street Connector & Mission Flats Road East	Arterial	3.60	---
KELOWNA (C)	691R	Okanagan Highway	Arterial	20.91	---
	692R	Rock Creek-Kelowna Highway	Arterial	9.10	---
	701R	Rutland Road	Arterial	2.76	---
KENT (D)	160R	Harrison Hot Springs Road	Arterial	3.81	---
	290R	Rockwell Drive	Arterial	6.44	---
	545R	Agassiz Bypass	Arterial	2.74	---
	588R	Lougheed Highway	Arterial	33.50	---
	614R	Agassiz-Rosedale Highway	Arterial	4.59	---
KEREMEOS (V)	438R	Southern Trans-Provincial Highway	Arterial	2.00	---
	439R	Keremeos-Kaleden Junction	Arterial	0.82	---
KIMBERLEY (C)	557R	Street Mary's Lake Road	Arterial	4.02	---
	558R	Cranbrook-Kimberley-Wasa Highway	Arterial	9.49	---
KITIMAT (D)	277R	Terrace-Kitimat Highway	Arterial	6.84	---
	503R	Road to Industrial Area	Arterial	2.90	---
LADYSMITH (T)	577R	Trans-Canada Highway	Arterial	5.07	---
	176B	Chemainus Road	Secondary	---	1.45
LAKE COWICHAN (V)	679R	South Shore Road & Lake Cowichan Road	Arterial	2.48	---
LANGLEY (C)	263R	Fraser Highway	Arterial	4.83	---
	576R	200th Street (Carvolth Road)	Arterial	0.11	---
	665R	Langley Bypass	Arterial	1.27	---
	700R	Ladner-Langley Highway	Arterial	2.64	---
	256B	200th Street (Carvolth Road)	Secondary	---	3.22
LANGLEY (D)	77R	Aldergrove-Bellingham Highway	Arterial	6.50	---
	259R	Ladner-Langley Highway & Glover Road	Arterial	9.66	---
	262R	Fraser Highway	Arterial	17.70	---
	368R	County Line Road (Aldergrove-Bellingham Highway)	Arterial	4.34	---
	380R	Trans-Canada Highway & Interchanges	Arterial	32.86	---
	445R	200th Street (Carvolth Road)	Arterial	5.02	---
	457R	Ladner-Langley Highway	Arterial	2.78	---
LILLOOET (V)	513R	Lillooet-Cache Creek Road, Main Street, Main Street South. & Lillooet-Seton Lake Road	Arterial	4.01	---
	635R	Lytton-Lillooet Highway	Arterial	705.49 m	---
	636R	Lillooet-Pioneer Road	Arterial	489.11 m	---
	662R	Nugget Road	Arterial	930.00 m	---
LIONS BAY (V)	518R	Garibaldi Highway	Arterial	2.59	---
LOGAN LAKE (V)	641R	Meadow Creek Road	Arterial	3.73	---
	642R	Mamit Lake Road	Arterial	0.25	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
LUMBY (V)	567R	Vernon-Slocan Highway	Arterial	2.78	---
	279B	Shuswap Avenue	Secondary	---	2.66
LYTTON (V)	108R	Lytton-Lillooet Highway (Sixth & Fraser Streets)	Arterial	0.45	---
	478R	Trans-Canada Highway	Arterial	1.21	---
	479R	Lytton South Approach & Main Street	Arterial	1.45	---
MCBRIDE (V)	526R	Yellowhead Highway	Arterial	1.19	---
	236B	First Avenue & Main Street	Secondary	---	1.25
MACKENZIE (D)	436R	MacKenzie Highway & Parsnip River Road	Arterial	20.44	---
MAPLE RIDGE (D)	22R	Lougheed Highway	Arterial	20.05	---
	407R	River Road & 17th Avenue	Arterial	0.39	---
	689R	222nd Street & River Road	Arterial	2.54	---
	253B	Dewdney Trunk Road & 224th Street	Secondary	---	17.94
	254B	232nd Street & Fern Crescent	Secondary	---	6.44
MASSET (V)	494R	Harrison Avenue, Delkatla Street, Hodeges Avenue, Delkatla Causeway, Shore Road & Queen Charlotte City-Masset Road	Arterial	4.59	---
	640R	Tow Hill Road	Arterial	7.72	---
MATSQUI (D)	337R	McCallum Road (West side)	Arterial	1.91	---
	356R	Trans-Canada Highway	Arterial	13.82	---
	422R	Fraser Highway	Arterial	5.79	---
	671R	Huntingdon-Mission Highway	Arterial	8.23	---
	186B	South Fraser Way	Secondary	---	4.26
MERRITT (C)	73R	Merritt-Spences Bridge Highway	Arterial	1.61	---
	708R	Princeton-Kamloops Highway	Arterial	4.26	---
MIDWAY (V)	458R	Southern Trans-Provincial Highway	Arterial	7.21	---
	459R	Midway-U.S. Customs Road	Arterial	1.98	---
MISSION (D)	23R	Lougheed Highway	Arterial	14.64	---
	25R	Lougheed Highway (1st Avenue)	Arterial	2.25	---
	563R	Huntingdon-Mission Highway	Arterial	2.38	---
	605R	Lougheed Highway (North Railway Avenue)	Arterial	2.08	---
	672R	Huntingdon-Mission Highway (Northwest Approach)	Arterial	2.08	---
	77B	Dewdney Trunk Road	Secondary	---	24.94
	260B	Shook Road	Secondary	---	0.72
	283B	Grand Street, Seventh Avenue & Cedar Street	Secondary	---	5.15
MONTROSE (V)	246R	Nancy Greene Lake-Rossland-Meadows Hwy.	Arterial	1.61	---
NAKUSP (V)	484R	Vernon-Slocan Highway, Nelson Avenue & Broadway Street	Arterial	1.87	---
	540R	Nakusp-Mica Creek Highway (Broadway Street, 6th Avenue W. & Canyon Road)	Arterial	3.89	---
NANAIMO (C)	355R	Brechin Road	Arterial	1.05	---
	687R	Trans-Canada Highway	Arterial	10.44	---
	688R	Island Highway	Arterial	11.35	---
	221B	Esplanade & Front Street	Secondary	---	0.56
NELSON (C)	559R	Castlegar-Nelson-Creston Highway	Arterial	4.99	---
	560R	Nelson-Nelway Highway	Arterial	2.30	---
NEW DENVER (V)	88R	Vernon-Slocan Highway	Arterial	1.46	---
	291R	Kaslo-New Denver Highway (Sixth Avenue & Victoria Street)	Arterial	0.71	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length Arterial	Approximate Length Secondary
NEW HAZELTON (D)	709R	Yellowhead Highway	Arterial	7.00	---
	710R	New Hazelton Hi-Level Road	Arterial	0.60	---
NEW WESTMINSTER (C)	734R	Annacis Island Highway	Arterial	11.90	---
NORTH COWICHAN (D)	168R	Trans-Canada Highway	Arterial	19.47	---
	248R	Mt. Sicker Road, Chemainus Road, Crofton Road & Chaplin Road	Arterial	6.76	---
	249R	Cowichan Lake Road	Arterial	5.31	---
	482R	Cowichan Valley Highway	Arterial	5.57	---
	723R	Tanzor Road	Arterial	0.80	---
	169B	Chemainus Road	Secondary	---	7.88
	269B	Oak Street	Secondary	---	0.97
NORTH SAANICH (D)	411R	West Saanich Road	Arterial	9.01	---
	412R	Wains Road	Arterial	2.41	---
	416R	Lochside Drive	Arterial	0.71	---
	453R	Patricia Bay Highway	Arterial	6.39	---
	510R	Dolphin Road & Swartz Bay Road	Arterial	0.48	---
	585R	Canora Road	Arterial	0.97	---
	193B	McTavish Road	Secondary	---	3.54
NORTH VANCOUVER (C)	612R	Trans-Canada Highway & Interchanges	Arterial	4.81	---
NORTH VANCOUVER (D)	157R	Main Street, Dollarton Highway, & Deep Cove Road	Arterial	9.19	---
	611R	Trans-Canada Highway & Interchanges	Arterial	12.31	---
	199B	Riverside Drive & Mount Seymour Parkway	Secondary	---	3.83
OAK BAY (D)	162B	Cadboro Bay Road	Secondary	---	3.38
	290B	Cedar Hill Cross Road	Secondary	---	1.60
OLIVER (V)	441R	Okanagan Highway (First Avenue)	Arterial	1.77	---
	212B	Seventh Street & McKinney Road	Secondary	---	1.06
100 MILE HOUSE (V)	608R	Cariboo Highway	Arterial	2.40	---
	714R	Exeter Truck Route & Exeter Station Road	Arterial	1.23	---
	271B	Horse Lake Road	Secondary	----	0.85
OSOYOOS (V)	656R	Southern Trans-Provincial Highway	Arterial	5.53	---
	657R	Okanagan Highway	Arterial	1.60	---
	264B	Eighty-Ninth Street. & Sixty-Fourth Avenue	Secondary	---	1.48
PARKSVILLE (T)	177R	Parksville-Port Alberni-Tofino Highway	Arterial	1.22	---
	706R	Island Highway	Arterial	3.67	---
	707R	Parksville Bypass	Arterial	1.10	---
PEACHLAND (D)	367R	Okanagan Highway	Arterial	11.27	---
	633R	Princeton Avenue	Arterial	5.31	---
PEMBERTON (V)	420R	Pemberton Portage Road	Arterial	1.34	---
	609R	Garibaldi Highway	Arterial	1.19	---
	644R	Pemberton Meadows Road	Arterial	950 m	---
PENTICTON (C)	634R	Okanagan Highway	Arterial	8.46	---
	638R	Martin Street	Arterial	1.10	---
	650R	Penticton Channel Parkway	Arterial	6.24	---
	135B	Penticton-Naramata Road	Secondary	---	8.85
	273B	South Main Street & Lakeside Drive	Secondary	---	6.13

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
PITT MEADOWS (D)	21R	Lougheed Highway	Arterial	5.20	---
	74B	Harris Road	Secondary	---	2.74
	75B	Hammond Road	Secondary	---	1.45
	78B	Harris Road	Secondary	---	3.06
	79B	McNeil Road	Secondary	---	3.22
	92B	Old Dewdney Trunk Road	Secondary	---	5.63
PORT ALBERNI (C)	33R	Parksville-Port Alberni-Tofino Highway	Arterial	2.90	---
	152R	Parksville-Port Alberni-Tofino Highway (River Road)	Arterial	2.57	---
	39B	Beaver Creek Road	Secondary	---	0.69
PORT ALICE (V)		NIL			
PORT CLEMENTS (V)	690R	Cedar Avenue, Jasper Street, Bayview Drive, Bayview Cres. & Juskatla Bay Rd.	Arterial	2.30	---
	733R	Queen Charlotte City-Masset Road	Arterial	2.62	---
PORT COQUITLAM (C)	594R	Lougheed Highway	Arterial	5.23	---
	673R	Mary Hill Bypass	Arterial	2.42	---
	288B	Pitt River Roadd., McLean Avenue & Kingsway Avenue	Secondary	---	3.96
PORT EDWARD (V)	599R	Port Edward-Cassiar Cannery Road	Arterial	14.24	---
	686R	Yellowhead Highway	Arterial	27.00	---
PORT HARDY (D)	504R	Hardy Bay Road	Arterial	3.96	---
	506R	Island Highway	Arterial	2.29	---
	621R	Byng Road	Arterial	3.03	---
	713R	Island Highway	Arterial	9.40	---
	737R	Douglas Street & Holberg Road	Arterial	4.50	---
	240B	Airport Road	Secondary	---	2.67
PORT MCNEILL (V)	507R	Campbell way	Arterial	1.93	---
PORT MOODY (C)	200R	Barnet Highway	Arterial	6.32	---
	632R	Ioco-Port Moody Road & Knowle Drive	Arterial	4.25	---
	116B	Clarke Road	Secondary	---	1.29
	265B	Knowle Drive	Secondary	---	2.21
POUCE COUPE (V)	602R	Dawson Creek-Tupper Highway	Arterial	1.43	---
POWELL RIVER (D)	397R	Wharf Street	Arterial	0.14	---
	603R	Sunshine Coast Highway (Marine Avenue, Ash Avenue, Poplar Street, Arbutus Avenue & Lund Street)	Arterial	14.48	---
	143B	Duncan Street	Secondary	---	2.74
PRINCE GEORGE (C)	697R	Yellowhead Highway	Arterial	26.38	---
	698R	Cariboo Highway & John Hart-Peace River Highway	Arterial	27.75	---
	699R	Aitcheson Road & Airport Road	Arterial	3.75	---
PRINCE RUPERT (C)	487R	Co-op Road, Park Avenue, Second Avenue, McBride Street & Yellowhead Highway	Arterial	15.05	---
	730R	Ridley Island Access Road	Arterial	6.73	---
PRINCETON (T)	586R	Princeton-Kamloops Highway	Arterial	2.11	---
	587R	Tulameen Road	Arterial	2.99	---
	589R	Southern Trans-Provincial Highway	Arterial	3.54	---
	203B	Bridge Street	Secondary	---	0.64
QUALICUM BEACH (V)	94R	Island Highway	Arterial	5.25	---
	154R	Alberni Road, Second Avenue, & Memorial Avenue	Arterial	2.57	---
	435R	Island Highway (Qualicum Beach Diversion)	Arterial	2.56	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
QUESNEL (C)	533R	Ewing Street & Fraser River Bridge	Arterial	0.39	---
	591R	Elliott Street & Blackwater Road	Arterial	2.04	---
	592R	Anderson Drive, Marsh Drive, Moffat Bridge & Approaches	Arterial	3.56	---
	702R	Cariboo Highway	Arterial	7.72	---
	703R	Barkerville Highway	Arterial	0.15	---
REVELSTOKE (C)	400R	Trans-Canada Highway	Arterial	1.61	---
	401R	Nakusp-Mica Creek Highway	Arterial	4.35	---
	163B	Victoria Road, Railway Avenue, & Fourth Street	Secondary	---	2.17
RICHMOND (D)	295R	Sea Island Highway	Arterial	1.50	---
	301R	Vancouver-Blaine Highway	Arterial	10.03	---
	343R	Westminster Highway	Arterial	10.38	---
	564R	Knight Street	Arterial	7.11	---
	734R	Annacis Island Highway	Arterial	11.90	---
	234B	No. 3 Road & Bridgeport Road	Secondary	---	3.70
ROSSLAND (C)	418R	Nancy Greene Lake-Rossland-Meadows Highway	Arterial	1.69	---
	622R	Rossland-Paterson Highway & Nancy Greene Lake-Rossland-Meadows Highway	Arterial	4.02	---
SAANICH (D)	529R	West Saanich Road & Royal Oak Drive	Arterial	8.93	---
	538R	Trans-Canada Highway	Arterial	4.38	---
	660R	Patricia Bay Highway	Arterial	14.55	---
	661R	Trans-Canada Highway-Patricia Bay Highway Connector	Arterial	0.85	---
	681R	McKenzie Avenue	Arterial	2.08	---
	148B	Tillicum Road	Secondary	---	0.14
	154B	Gorge Road	Secondary	---	2.74
	237B	Quadra Street	Secondary	---	4.99
	238B	West Saanich Road	Secondary	---	1.21
SALMO (V)	668R	Southern Trans-Provincial Highway	Arterial	1.05	---
	669R	Nelson-Nelway Highway	Arterial	1.02	---
	670R	Fourth Street	Arterial	0.58	---
SALMON ARM (D)	655R	Grindrod-Salmon Arm Highway	Arterial	5.50	---
	683R	Trans-Canada Highway	Arterial	22.43	---
	23B	Salmon Arm-Enderby	Secondary	---	1.11
	24B	Salmon Arm-Enderby	Secondary	---	6.76
	80B	Salmon Arm-Enderby	Secondary	---	0.34
	217B	Salmon Arm-Grand Prairie Road	Secondary	---	9.98
SAYWARD (V)	693R	Sayward Highway	Arterial	4.38	---
SECHELT (V)	244R	Porpoise Bay Road	Arterial	1.05	---
	320R	Sunshine Coast Highway	Arterial	1.58	---
SIDNEY (T)	292R	Ocean Avenue	Arterial	0.29	---
	388R	Patricia Bay Highway	Arterial	3.03	---
	389R	Lochside Drive & Fifth Street	Arterial	1.67	---
	390R	Beacon Avenue	Arterial	0.53	---
	194B	Fifth Street, Malaview Avenue & Resthaven Drive	Secondary	---	2.86
	207B	First Street & Beacon Avenue	Secondary	---	0.85
	228B	McDonald Park Road (East half)	Secondary	---	0.40
SILVERTON (V)	443R	Vernon-Slocan Highway	Arterial	0.95	---
SLOCAN (V)	581R	Vernon-Slocan Highway	Arterial	67.06 m	---
SMITHERS (T)	607R	Yellowhead Highway	Arterial	4.19	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
SPALLUMCHEEN (D)	271R	Vernon-Sicamous Highway	Arterial	21.73	---
	153B	Pleasant Valley Highway	Secondary	---	3.62
	171B	Armstrong-Salmon River Highway	Secondary	---	11.83
SPARWOOD (D)	448R	Corbin Road	Arterial	1.13	---
	489R	Elk Valley Road	Arterial	5.71	---
	724R	Southern Trans-Provincial Highway	Arterial	26.71	---
SQUAMISH (D)	399R	Darrel Bay Road	Arterial	0.32	---
	406R	Alice Lake Road	Arterial	0.58	---
	648R	Garibaldi Highway	Arterial	29.00	---
	649R	Squamish Valley Road	Arterial	5.25	---
	284B	Mamquam (Garibaldi Park) Road	Secondary	---	3.82
STEWART (D)	584R	Stewart-Meziadin Lake Highway	Arterial	17.06	---
SUMMERLAND (D)	238R	Okanagan Highway	Arterial	11.27	---
	270B	North Prairie Valley Road	Secondary	---	5.52
	289B	Fish Lake Road	Secondary	---	1.74
SURREY (D)	114R	Campbell River Road	Arterial	1.61	---
	125R	Ladner-Langley Highway	Arterial	10.04	---
	139R	Scott Road	Arterial	11.33	---
	269R	Ladner-Langley Highway	Arterial	4.46	---
	314R	Old Yale Road & Bridge Road	Arterial	1.21	---
	371R	Vancouver-Blaine Highway & Interchanges	Arterial	22.93	---
	379R	Trans-Canada Highway & Interchanges	Arterial	22.56	---
	384R	King George Highway	Arterial	27.02	---
	385R	Fraser Highway	Arterial	14.08	---
	455R	Ladner-Langley Highway	Arterial	0.97	---
	554R	Pacific Highway	Arterial	19.20	---
	150B	Campbell River Road	Secondary	---	2.41
	151B	Marine Drive, Stevenson Road & Crescent Road	Secondary	---	9.25
	182B	152nd Street (Johnston Road)	Secondary	---	2.41
TAHSIS (V)		NIL			
TAYLOR (V)	601R	Alaska Highway	Arterial	4.41	---
	161B	Taylor-Peaceview Road	Secondary	---	1.53
TELKWA (V)	440R	Yellowhead Highway	Arterial	2.30	---
	250B	Telkwa High Road	Secondary	---	0.64
	286B	Telkwa Coal Road	Secondary	---	1.60
TERRACE (D)	570R	Kalum Lake Road	Arterial	3.22	---
	595R	Yellowhead Highway	Arterial	5.95	---
TOFINO (V)	547R	Parksville-Port Alberni-Tofino Highway	Arterial	2.56	---
TRAIL (C)	624R	Nancy Greene Lake-Rossland Meadows Hwy.	Arterial	7.40	---
	704R	Paterson-Rossland-Castlegar Highway	Arterial	2.02	---
	711R	Smelter Hill Road	Arterial	2.64	---
	285B	Warfield Hill Road	Secondary	---	2.53
TUMBLER RIDGE (D)	726R	Chetwynd-Tumbler Ridge Road	Arterial	29.00	---
	727R	Heritage Highway	Arterial	39.00	---
UCLUELET (V)	192R	Tofino-Ucluelet Road (Penninsula Road & Main Street)	Arterial	1.82	---
VALEMOUNT (V)	432R	Fifth Avenue	Arterial	1.06	---
VANCOUVER (C)	375R	Trans-Canada Highway	Arterial	1.56	---

Statement Showing Highways Classified as at March 31, 1982—Continued

Name of Municipality	Ref. No.	Name of Highway	How Classified	Approximate Length	
				Arterial	Secondary
VANDERHOOF (V)	233R	Vanderhoof-Stuart Lake Highway (Burrard Avenue)	Arterial	1.53	---
	667R	Yellowhead Highway	Arterial	24.05	---
	287B	Kenney Dam Road	Secondary	---	2.89
VERNON (C)	573R	Okanagan Highway	Arterial	6.41	---
	684R	Vernon-Slocan Highway	Arterial	2.85	---
	251B	Twenty-Seventh Street	Secondary	---	1.85
VICTORIA (C)		NIL			
WARFIELD (V)	623R	Nancy Greene Lake-Rossland Meadows Highway	Arterial	2.59	---
WEST VANCOUVER (D)	89R	Marine Drive Addition	Arterial	0.16	---
	250R	Taylor Way	Arterial	1.13	---
	289R	Garibaldi Highway	Arterial	5.31	---
	372R	Marine Drive	Arterial	0.80	---
	613R	Trans-Canada Highway & Interchanges	Arterial	30.83	---
WHISTLER (R)	598R	Garibaldi Highway	Arterial	19.96	---
WHITE ROCK (C)	149B	Marine Drive	Secondary	---	5.02
WILLIAMS LAKE (T)	659R	Chilcotin-Bella Coola Highway	Arterial	3.12	---
	676R	Cariboo Highway	Arterial	3.57	---
	736R	MacKenzie Avenue	Arterial	7.40	---
ZEBALLOS (V)	196R	Zeballos Road	Arterial	1.61	---
			TOTALS	1996.22	318.52

REPORT OF THE DIRECTOR OF CONSTRUCTION

N. R. Zapf

During the year ended March 31, 1982, the Construction Branch was responsible for administering 40 major projects; of these, five were undertaken by day labour with the remainder going to contract. Twenty-nine contracts continued from the previous year, with the remaining six awarded in 1981. The total expenditure on contracts for the 1981/82 fiscal year was $99.1 million.

The following table gives a breakdown of contracts by type being carried out during the year:

Table 1

	Two-lane	Four-lane	Total
Urban Reconstruction/Relocation	—	6	6
Urban New Route	2	3	5
Rural Reconstruction/Relocation	14*	2	16
Rural New Route	8	—	8
Other	—	—	5
	24	11	40
Grading Only	17		
Grading and Paving Combined	18		
Other	5		

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* Includes eight contracts on Highway 23, Revelstoke–Mica

The Lower Mainland and Vancouver Island areas of the Province had many of their projects completed or nearly completed in 1981. Of the ten projects active within these two areas at the beginning of 1981, a full eight are totally complete while the other two will be completed in 1982. Work included the successful stockpiling of about 1.5 million cubic metres of sand for future development of the Annacis crossing route, the completion of a two-lane by-pass route at Courtenay, the near completion of the Cheakamus Canyon section of the Squamish–Whistler Highway and the completion of a four-lane route on the Vancouver–Burnaby boundary. A project to build a two-lane road from Byrne Road to the Queensborough Bridge will begin early in the 1982/83 fiscal year.

Work continued on the Revelstoke–Mica section of Highway 23, with eight of the 14 projects on this route active in 1981. Nine of these 14 are now essentially complete; the remainder will be complete in the 1982/83 fiscal year.

Two Coquihalla Highway projects were active during the 1981/82 fiscal year. The first, a 4.8 km section near Hope, was completed in May 1981; the second, a 4.5 km section from Boston Bar Creek to Dry Gulch south of Merritt, is now about 80 per cent complete.

Three Northeast Development projects, designed to provide access to the new Townsite of Tumbler Ridge, were initiated in 1981. A heavy emphasis will continue on this area in the future, with four more projects scheduled to begin early in 1982.

Road building continued in the interior of the Province around Kelowna and Kamloops. In the fiscal year 1981/82, 3.4 km of the Westbank–Kelowna section of Highway 97 were completed to four-lane standard, and construction was initiated on a further 6.56 km extension of the same roadway. The Summit Drive Extension project, designed to grade and pave 4.18 km of roadway in Kamloops, was started in June 1981 and is now about 80 per cent complete.

Other noteworthy projects active in the 1981/82 fiscal year include: four-laning 10.26 km of the Hart Highway just north of the Nechako River at Prince George; a 10.61 km realignment of the Hart Highway near Summit Lake; a 13.95 km four-lane grading and paving project east of Hope through the Hope Slide; and finally a 6.7 km grading and paving project to provide access to the new port at Prince Rupert. The four above-mentioned projects are all scheduled to complete in the summer of 1982.

Table 2

(a) Distances

Under construction	338 km
Two-lane road built	76 km
Four-lane road built	20 km
Paved	50 km

(b) Quantities

Clearing and Grubbing	700 ha
Excavation—Rock	1 935 060 m^3
Excavation—Other Materials	7 340 146 m^3
Select Granular Sub-base	1 492 393 t
Crushed Granular Base and Surfacing	1 088 403 t
Asphaltic Concrete	186 293 t

REVELSTOKE–MICA CONTRACTS (HIGHWAY 23): 1981/82

Project Number	Location and Description	Highway Number	Length (km)	Date Started	Date Completed	Per Cent Complete	Remarks
C-3936	Station 840 + 52.08 to Station 908 + 68.366	23	6.82	Nov. 79	—	88	
C-3941	Station 391 + 00 to Station 466 + 40	23	7.54	Oct. 79	July 81	100	
C-3942	Station 470 + 00 to Station 586 + 12	23	11.54	June 79	June 81	100	
C-3943	Station 586 + 13.7 to Station 660 + 30	23	7.4	April 80	—	96	
C-3958	Station 661 + 21 to Station 743 + 50	23	8.2	April 80	—	88	
C-3960	Station 1071 + 59.984 to Station 1162 + 93.960	23	9.1	May 80	—	85	
C-3961	Station 1182 + 40 to Station 1255 + 44	23	7.2	May 79	Sept. 81	100	
C-3962	Station 1255 + 44.263 to Station 1325 + 90.713	23	6.1	Sept. 80	—	87	

GRADING CONTRACTS PROGRESS: 1981/82

Project Number	Location and Description	Highway Number	Length (km)	Date Started	Date Completed	Per Cent Complete	Remarks
C-0102	John Hart Highway. Construction: Summit Lake By-Pass. Station 635 + 00 to Station 988 + 00	97	10.61	Aug./80	—	82	This two-lane realignment is scheduled to complete in June 1982.
C-0252	Reconstruction of Cheakamus Canyon Section of Garibaldi Highway	99	2.43	Feb./81	—	82	Large rock excavation project near Whistler.
C-0253	Yellowhead Highway. Reconstruction: Kasiks River to Backwater Creek. Station 1939 + 50 to Station 2220 + 00	16	8.56	Nov./80	—	46	Rock quarrying project on the Skeena River.
C-0598	Fraser River Crossing. Queensborough Bridge. Supply of Dredged Material	—	—	Nov./80	July/81	100	A dredging project which produced about 1.3 million cubic metres of sand for future Annacis crossing.
C-0748	Construction: Northeast Coal Development Road. Bullmoose to Tumbler Ridge West. Station 151 + 00 to Station 345 + 70	—	19.47	Aug./81	—	15	Clearing is completed and a start has been made on excavation and culvert installation.
C-0749	Construction: Northeast Coal Development Road. Bullmoose to Tumbler Ridge East. Station 345 + 70 to Station 442 + 00	—	9.63	Oct./81	—	6	Work restricted to clearing and the erection of temporary bridges.
C-0790	Contract 1. Summit Drive Extension. Stage 1. Kamloops	—	4.18	June/81	—	64	This grading and paving job in Kamloops is scheduled to complete in August 1982.
C-1066 -0002	Reconstruction: Westbank to Kelowna. Section III. Okanagan Highway. Mile 44.43 to Mile 46.72	97	6.56	Oct./81	—	14	Involves the reconstruction and paving of a section of the Okanagan Highway. Scheduled completion June 1983.
C-2792	Hart Highway. Reconstruction: Nechako River Bridge to Chief Lake Road	97	10.26	Oct./80	—	79	Four-laning reconstruction project north of Prince George. Scheduled to complete in July 1982.
C-2901	Island Highway. Reconstruction: Lantzville to Craig's Crossing	19	14.24	Jan./80	—	88	Four-laning reconstruction north of Nanaimo. scheduled to complete in June 1982.
C-3760	Construction: Coquihalla Highway. Nicolum Creek to Peers Creek. Station 375 + 00 to Station 533 + 80	—	4.8	Dec./78	May/81	100	This, the first project on the Coquihalla Highway, was completed in May 1981.
C-3912	U.B.C. Endowment Lands. Reconstruction: 4 Lanes: 16th Avenue and S.W. Marine Drive	—	4.75	July/79	Oct./80	100	A grading and gravelling project conceived to realign and reconstruct S.W. Marine Drive and 16th Avenue.

C-3913	Cassiar Highway. Construction: D.L. 1879 to Cranberry Bridge 1	37	18.36	Dec /79	July/81	100	A two-lane reconstruction project starting about 45 km north of Kitwanga.
C-3997	Contract 2. Marine Way. Boundary Road to Byrne Road. Station 0 + 00 to Station 101 + 97	—	3.1	Nov./79	July/81	100	Built over peat on the Fraser River delta, this project required special techniques to construct.
C-4093	Construction of Haney Business By-Pass, Maple Ridge, B.C.	7	3.0	Sept./79	Sept./81	100	This route is effectively relieving traffic in Haney's downtown business area.
C-4102	93 Mile to Little Fort, Little Fort to Phinetta Lake, Section 2	24	16.05	Nov.79	June/81	100	A two-lane grading and gravelling project west of Little Fort; it was completed this year.
C-4156	Reconstruction: Barkerville Highway Mitchell Bridge Elimination	26	1.86	Oct./79	June/81	100	This project involved grading and gravelling the first 1.8 km of the Barkerville Road.
C-4291	Abbotsford to Mission Highway, Mission Roadworks, Northwest Approach	11	1.35	Jan./80	Aug./81	100	Involved grading and paving from the north end of the Mission Bridge westward towards the Lougheed Highway.
C-4370	Contract 1, Lillooet Access Road, Reconstruction of Station Hill Road including Construction of Metal Bin Retaining Walls and Protection of Railway Wye	12	4.26	Sept./80	June/81	100	This grading and paving project forms a connector to the new Fraser River Bridge.
C-4477	Reconstruction: Nicolum Creek to West Boundary of Manning Park Section of Southern Trans-Provincial Highway	3	13.95	Jan./80	—	83	A four-lane reconstruction project east of Hope, scheduled to complete in July 1982.
C-4478	Construction: Coquihalla Highway, Boston Bar Creek summit to Dry Gulch	—	4.5	June/80	—	82	Large earth moving and rock project scheduled for summer of 1982 completion.
C-4483	Construction: Prince Rupert to Ridley Island, Station 43 + 20.00 to 110 + 49.447	—	6.72	Sept./80	—	82	A grading and paving project to provide access to the new port at Prince Rupert, scheduled to complete in June 1982.
C-4484A	Fort Nelson to Fort Simpson Highway, Structural Steel Plate Pipe Installations	—	—	Aug./80	April/81	100	Involved installation of large structural steel plate culverts on the new Liard Highway.
C-4485	Reconstruction: Okanagan Highway, Westbank to Kelowna, Section 2	97	4.0	Feb./80	June/81	100	A four-laning grading and paving project south of Kelowna.
C-4513	Contract 1, Northeast Development Road, Junction Highway 97 to Martin Creek, Station 21 + 05.42 to Station 778 + 50	—	22.83	Jan./81	—	97	This two-lane grading and gravelling project is scheduled to complete in August 1982.
C-4527	17th Street Crossing, Courtenay, Cliffe Avenue to Dingwall Road	19	6.5	Oct./80	July/81	100	This grading and paving project provides a two-lane by-pass route of Courtenay.

REPORT OF THE DIRECTOR OF PAVING

D. F. Martin, P.Eng.

During the 1981/82 fiscal year, the Paving Branch administered work on 27 projects. Of these projects, 16 were called prior to the 1981/82 fiscal year, and 11 were called during the year. Work on 21 projects was completed, while work on four commenced in 1981 and will continue in 1982. Two contracts were called late in the year for commencement of work in the 1982 paving season.

There were 575.32 km of road surfaced with asphalt concrete pavement under contract this year (617.57 km of two-lane equivalent).

In addition Paving Branch operations crews paved 101.30 km of road and one airstrip with plant mixed asphalt concrete and 405.10 km were treated with granular surfacing sealing treatments.

This year the Branch's operational drum crew used High Float 300M emulsion and AC-8 asphalt cement as well as the standard MC-250 cutback with good success. The performance and economics of each material used will be monitored annually.

The curb and gutter upgrading of Glenmore Street in Kelowna and Two Mile Flat in Quesnel, both commenced last year, were completed this year. Short sections of curb and gutter work were also done this year in Vanderhoof and Agassiz. Paving at Agassiz will be completed next year.

The major upgrading of Highway 99 in Richmond was completed this year. Top lift paving of the widened section was completed. Early in the 1981 calendar year the southbound "tube" of the George Massey Tunnel was opened to two-way traffic during the morning peak traffic period, thus giving a total of three-northbound lanes during this period.

Paving of the reconstructed section of Highway 23 was carried out this year, and paving on this highway will continue in 1982 as construction is completed. Major sections of the highway require relocating above the new water level behind the Revelstoke Canyon Dam, currently under construction.

This year the Branch called its first major project with a recycling option, on the Highway 23 construction. The contractor opted to reclaim the existing pavement, and recycle it for use as bottom lift pavement. In this process, the existing pavement was picked up and ground into small pieces with a pavement grinder. The ground material was hauled to the plant site, where it was hot mixed with addition of some virgin aggregate and asphalt cement (various proportions of virgin-to-recycled material were used for testing purposes). Paving of the recycled mixture was done with conventional laydown equipment. The concept of pavement recycling is one that has enjoyed an increase in popularity, in recent years, that is proportional to the spiralling cost of asphalt products. With the cost of asphalt cement rising rapidly, (from $44 per tonne in 1974 to $260 during 1981, with projected price of $380 per tonne by 1984) the economic aspects of recycling, particularly when old alignments are to be abandoned, are obvious. The cost saving of asphalt products, combined with the conservation of dwindling resources of suitable aggregates, should more than offset the cost of modifications required to the contractor's equipment.

Materials Used Under Contract 1981/82

Description	Unit	Quantity
Common Excavation	m^3	1,395
Foundation and Trench Excavation	m^3	776
Select Granular Base	t	124,342
Crushed Granular Base	t	4,635
Crushed Granular Surfacing	t	790,256
Crushed Shoulder Aggregate	t	71,440
Crushed Aggregate in Stockpile	t	71,440
Sealcoat Aggregate in Stockpile	t	2,511
Asphalt Concrete Pavement	t	1,085,686
Asphalt Concrete Mix f.o.b. Plant	t	11,656
Asphalt Curb	m	27,270
Portland Cement Curb and Gutter	m	2,552
Portland Cement Curb	m	1,837
Concrete Pipe Installed	m	680
Corrugated Metal Pipe Installed	m	840
Asphalt Cement	t	58,546
Cutback Asphalt	L	3,977,082
Emulsified Asphalt	L	1,727,221
Milling	m^2	13,984
Patch Mix in Stockpile	t	3,371
Install 686 m Guardrail	m	15,332
Pavement Reinforcing Fabric	m^2	32,069

Materials Used by Paving Branch Operation Crews

Description	Unit	Quantity
Asphalt Pavement	t	122,517
Crushed Surfacing Aggregate	m^3	49,399
Cutback Asphalts	L	3,307,574
High Float Asphalt	L	10,733,703
Asphalt Cement	t	346
Sealcoat Aggregate (by contract)	t	8,000
Crushed Aggregate (by contract)	m^3	8,000

Paving Contracts, Continued From 1979

Project Number	Location	Total Length km	Length Completed This Fiscal Year		Remarks
			Actual Length	Two-lane Equivalent	
S-2938	Glenmore Street, Kelowna	2.00	1.20	2.40	Complete
S-792301	Highway 6: Mine Hill-Inonoaklin	31.80	15.90	17.00	Complete
S-795102	Highway 37: Nass River–Derrick Creek	62.00	31.00	31.00	Complete
S-795201	Highway 16: Khyex River–Backwater Creek	26.40	17.20	17.20	Complete
S-795501	François Lake: Miscellaneous Roads	38.60	9.70	9.70	Complete

Continued From 1980

Project Number	Location	Total Length km	Actual Length	Two-lane Equivalent	Remarks
S-0034	Highway 23: Downie Creek–Big Mouth Creek	28.50	28.50	28.50	Complete
S-0035	Highway 99 and Sea Island Way	11.29	6.14	12.28	Complete
S-0278	Highway 97: Two Mile Flat, Quesnel	7.00	4.00	8.00	Complete
S-0414	Miscellaneous Roads—Fraser Lake	18.60	3.60	3.60	Complete
S-0639	Highway 19: Ocean Grove–Black Creek	16.60	16.60	16.60	Complete
S-0640	Highway 16: New Hazelton–Mud Flat and Miscellaneous Roads	44.90	44.90	48.90	Continuing
S-0641	Port Alice–Island Highway 19	16.70	17.70	17.70	Complete
S-0642	Highway 16: Moose River–Fraser River	48.70	48.70	59.05	Complete
S-0644	Miscellaneous Roads—Horsefly and Likely Areas	62.70	69.30	69.30	Complete
S-0645	Highway 97: Pinaus Lake Road–Hanna Road	27.00	27.00	27.00	Complete
S-0646	Highway 3: Paulson Bridge–Kinnaird O/P	48.40	48.40	57.67	Complete

Called This Year

Project Number	Location	Total Length km	Actual Length	Two-lane Equivalent	Remarks
S-0647	Highway 3: Junction Ucluelet–Tofino Highway–Sutton Pass	35.20	—	—	Continuing
S-0648	Whistler and Pemberton Area Roads	35.55	35.55	35.55	Complete
S-0652	Agassiz Curb and Gutter	5.67	5.13	5.67	Continuing
S-0763	Vanderhoof Miscellaneous Roads	47.70	47.70	49.20	Complete
S-1009	Highway 23: Martha Creek–Mars Creek	24.50	24.60	24.60	Complete
S-1049	Fort St. John Miscellaneous Roads	46.70	12.00	12.00	Continuing
S-1050	Dog Creek Road	29.10	29.10	29.10	Complete
S-1063	Highway 23: Mars Creek–Downie Creek	31.75	—	—	Continuing
S-1120	Crushed Aggregate—Rose Prairie	—	—	—	Continuing
S-0744	Highway 18: T.C.H. Junction–Meade Creek	30.90	30.90	34.55	Complete
S-1058	Port Mann Bridge	.50	.50	1.00	Complete
	Totals		575.32	615.57	

Paving by Paving Branch Operations Crews—Sealcoat and Shoulder Treatments

Project Number	Job Number	District	Location	km Road	km Shoulder
S-0084	2404	Penticton	Miscellaneous Roads, Keremeos-Cawston Area	44.85	—
	2605	Lillooet	Highway 12B, Miscellaneous Sections from km 17–71.8	29.5	—
	3402	New Denver	Highway 23, Galena Bay–Halfway River	9.8	—
	3503	Cranbrook	Highway 63, Wardner–Fort Steele	31.2	—
	3504	Cranbrook	Highway 95, Kimberley–Cranbrook	10.65	—
	3801	Revelstoke	Highway 31, Galena Bay–Armstrong Lake and Trout Lake Road	21.45	—
	3902	Creston	Miscellaneous Roads, Creston Area	29.70	—
	4102	Prince George	Highway 97, km 112–Honeymoon Creek	71.95	—
	4301	Dawson Creek	Highway 97, Mount LeMoray Area	22.40	—
	5301	Dease Lake	Highway 37, Dease Lake–Tanzilla and Boulder Road	17.50	17.50
	5302	Dease Lake	Highway 37, Pinetree Lake–Cassiar Junction	81.60	81.60
	5502	Burns Lake	Miscellaneous Roads, Southbank Area	34.50	—
			Totals	405.10	99.10

Plant Mixed Pavement

S-0085	2101	Kamloops	Clearwater Valley Road	17.30	—
	2606	Lillooet	Lillooet Airstrip	N/A	—
	2705	100 Mile House	Kelly Road	17.50	—
	2706	100 Mile House	Chasm Road	11.20	—
	3308	Grand Forks	Highway 33, Rock Creek	10.10	—
	3403	New Denver	Highway 6, Silverton–12 Mile Creek	19.90	—
	3901	Creston	Creston Area Miscellaneous Roads	25.30	—
			Totals	101.30	—

REPORT OF LANDS SURVEYS OFFICER

F. A. Clapp

During the fiscal year 162 survey projects were undertaken with funds from the Legal Survey and Construction Project Votes. Through the surveys 335 km of main and secondary highways were legally surveyed.

Funds were also provided to establish drainage easements, to prepare plans of subdivisions for gravel pits and for defining right of way through surplus lands prior to the transfer to the Ministry of Lands, Parks and Housing for their disposal. Projects for the referencing of survey monuments prior to construction and for the restoration of destroyed monuments were also undertaken.

A total of 320 plans were processed through this office, of these 173 were forwarded to the appropriate land title office for registration.

Expenditures were:

Legal Survey Vote	$559,279.43
Construction Project Vote	157,556.71
	$716,836.14

REPORT OF DIRECTOR OF MAINTENANCE SERVICES

P. B. MacCarthy, P.Eng.

In the 1981/82 fiscal year, road and bridge maintenance cost $156,700,000. This was a 9 per cent increase over the previous year.

Ministry gravel crushers produced 540,017 m³ of crushed granular aggregate which was supplemented by the calling of 25 contracts for the supply of 739,436 m³ of additional crushed gravel. The material was used primarily for capital day labour and minor betterment programs, however about 40 per cent was utilized for maintenance and winter sanding purposes.

Heavy rains in the late spring, and particularly in the fall and early winter, caused extensive damage in various parts of the Province and, in particular, along Highway 99 between Horsehoe Bay and Squamish.

Rock and mud slides on Highway 99 started in May when 500 m³ of rock closed the highway for four hours and in early October 300 m³ closed the highway for two hours at Sunset Creek. These events became overshadowed by the disasterous washout of "M" Creek Bridge October 27 when rock and debris destroyed three of 15 trestle spans at night resulting in nine fatalities and closing the highway for four days until a Bailey bridge was erected. Subsequent washout at Hallowe'en, as a result of the record rainfalls, resulted in $340,000 damage, and closing the highway for a day. Rock slides in November and December caused a further $400,000 damage, including the Strachan Bridge No. 2 slide when 20,000 m³ of rock, mud and debris slid down the creek burying the bridge and destroying property.

Following heavy rains, Highway 3 between Elko and Fernie was closed by a washout for three days during which traffic was detoured. Immediate repair costs were $80,000. The Dease Lake District also experienced major damage in various locations with repairs costing $200,000, while flooding, mud slides and erosion caused $110,000 damage to various roads in the Lillooet District.

A timber Howe Truss span of the Perry's Bridge over the Slocan River in the Nelson District collapsed under a loaded logging truck. The second Howe Truss span was demolished and a 91 m Bailey bridge erected on a three span continuous basis, capable of carrying legal loads.

The Old Skeena River Bridge in Terrace was given a major renovation, including the replacement of timbers and the painting of all steel. An unusual treatment involved the replacement of the fir deck with Ekki, a very durable African hardwood which should reduce deck maintenance drastically.

SNOW AVALANCHE PROGRAM

The snow avalanche management program continues throughout the Province. Avalanche activity affecting highways was above average in the Province because of heavy amounts of precipitation.

Training in avalanche awareness and safety continues to be a key section of the avalanche program. Courses were held in cooperation with the National Research Council, Parks Canada and B.C.I.T., as well as several in-service courses. Over 200 employees received avalanche related training during 1981/82.

Search and rescue plans and equipment have been upgraded and completed for avalanche areas throughout the Province.

The weather reporting network is continuing to operate successfully and, as a result, more accurate avalanche hazard forecasts are being made.

The avalanche hazard evaluation of existing and proposed tramways and ski areas is continuing to increase as an activity in the avalanche program. Several detailed studies were completed during 1981/82.

MAINTENANCE MANAGEMENT PROGRAM

As a result of funding restraints, the 1981–82 Provincial highway maintenance budget had some reductions from the previous budget in funded levels of service. These included:

	Per Cent
Road Surface	−6
Drainage	+3
Roadside	−4
Winter Maintenance	−9
Signs	−3
Structures	−4

The maintenance budget was supplemented by a minor betterment program of $10,300,000 from capital funds to undertake minor improvements to the highway and road network in each District.

In the 1981/82 maintenance program emphasis was placed on establishing more accurate and attainable activity objectives in Districts, and in the developing of further innovations to effectively plan and schedule work to meet these goals.

Studies were initiated in a number of Districts to compare the effectiveness of alternative patch mixes, dust control palliatives and other maintenance materials. On-going method studies and research will be necessary to validate the present findings.

A project was initiated to update and improve the bridge inventory and inspection procedures for the Province. The system, once finalized, will provide faster updating and a wide selection of optional output reports to provide managers with bridge condition, status and statistical summary information.

Winter maintenance training was initiated with the development of a video tape on salt usage which was kicked off with a KNOWLEDGE NETWORK T.V. presentation viewed by maintenance crews and staff throughout the Province. It is hoped this medium will be used for other maintenance training in future.

The following quantities of stockpiled materials were produced and used by district crews during the period of April to March:

Production (m^3)

	Ministry	Contract	Total	Usage	Unit Price
16 mm crush	179 871	243 143	423 014	274 699 m^3	4.60 m^3
19 mm crush	360 546	496 293	856 155	718 404 m^3	4.20 m^3
Asphalt Mix	10 869	23 387	44 226	41 499 m^3	45.00 m^3
690 mm Guardrail pieces	5 329	9 708	15 037	19 161	85.00 pce.

Revenue generated to the end of March through the sale of these materials was $7,895,116, while production costs totalled $8,672,216. The on-going monitoring and control of these material production operations continues, to ensure a reasonable balance between usage and stockpile production.

ROADSIDE DEVELOPMENT PROGRAM

The roadside development program was well balanced in its distribution of activities for 1981. All regions showed good progress in their priorities.

Major landscape work occurred in the Lower Mainland where landscaping of the U.B.C. Marine Drive—16th Avenue Project was begun, and to the Okanagan where beautification of the Vernon–Swan Lake four-laning project was completed. On Vancouver Island, the final landscape contract for the north end of Blanshard Street Extension, Victoria, was completed.

Minor improvements were made to existing landscaped areas throughout the Province. The Ministry's arterial highway beautification community participation program continued to be popular, with four communities taking advantage of funds available for this purpose and others making inquiries for the future.

Excellent progress was made in the gravel pit rehabilitation program. Approximately 28 pits in the Province were recontoured, seeded and or reforested, as efforts are being made to reclaim these scarred areas.

The 1981 hydroseeding program totalled 3 844 ha of which 2 978 ha were seeded, 232 ha were mulched and 634 ha were refertilized.

Extensive vegetation control was carried out in all regions. Herbicides were used to eradicate all vegetation on 2 129 km of road shoulders and treat 483 ha of noxious weeds.

The rest area program continued to focus on improvement of existing facilities, especially the provision of water and power to those areas not as yet serviced.

Major restroom buildings were completed at Bradner and Cole Road Rest areas near Abbotsford. Cole Road was also undergoing extensive landscaping in 1981 with completion expected in early 1982. Landscaping of the 108 Mile rest area was largely completed in the fall, with paving and additional improvements planned for 1982.

Installation of new rest areas was generally limited only to highways where facilities were badly needed, although two major new areas were installed on Highways 16 and 5 in conjunction with the Mount Terry Fox dedication. In addition to providing comfort facilities, the Mount Terry Fox sites offer the travelling public good viewpoints to observe the mountain and to see the commemorative displays provided there.

Maintenance of major landscape installations on the Lower Mainland and Vancouver Island continues to be carried out by contract. A total of 34 ha was maintained for approximately $188,000.

CENTRELINE AND PAVEMENT MARKING

The weather in the spring of 1981 delayed the road marking program especially in Regions 1 and 6 from April to the end of June.

Several official openings, including the Courtenay Bridge, Bridge of the 23 Camels at Lillooet, Wycliff Bridge, Woodgrove Shopping Centre, Aberdeen Shopping Centre, Lillooet Airport and the Terry Fox Memorial required the fast response of manpower and equipment to meet the deadlines.

The thermoplastic crew laid its first plastic lines in the Terrace region this year, concentrating their efforts in the busier areas such as Terrace and Prince Rupert. They also established plastic on the multi-lane sections near Nelson and the Penticton, Kelowna and Vernon areas of the Okanagan. The plastic crew spent some time in the Prince George region doing all the new road markings in the Quesnel–Two Mile Flat area. The crew also returned to the Fort St. John–Dawson Creek area, using a little different material and slightly modified procedures. Due to the poor weather in Region 1 they concentrated their efforts on the Upper Fraser Valley, installing and repairing aerial speed reconnaissance lines. Several road markings were changed to thermoplastic in the Nanaimo–Courtenay areas of Vancouver Island.

The paint crews in the Lower Mainland were kept quite busy installing new markings in the Cheakamus, U.B.C., Massey Tunnel, Haney and the Hope Slide Areas; these jobs, in conjunction with inclement weather, made it possible to get all the repainting done. Similar weather on Vancouver Island slowed production, however new painting was done by the Region 6 crew on Highway 18, Port Alice Road and Courtenay Bridge and access.

Better weather conditions in the interior allowed the Region 2 crew to complete new line painting at Westwold, Monashee and the Kelowna areas, in addition to regular repainting. They were also able to carry on a large edge line repaint program from Cache

Creek to Skyline on the Trans-Canada Highway from Enderby to the Canada-U.S.A. boundary on Highway 17.

In Region 3 the crews were held up to some extent by the weather which slowed down the paving at Mica Creek and the Blueberry Paulson, necessitating many return trips to the areas to paint short sections. This resulted in having to eliminate a good portion of the edge line program in the East Kootenays.

The Region 4 crews were extremely busy with large areas of new pavement in the McLeod Lake, Tête Jaune and Williams Lake areas, in addition to the needed repainting.

Finished road markings were placed in the Southbank and Nass River areas of Region 5 highways, in addition to a bi-annual repaint of markings on the Queen Charlotte Islands.

The reflective marker crew, whose activities were confined to Regions 1 and 6, were also slowed down by poor weather. However, the Trans-Canada Highway from the end of the freeway to Kanaka Bar, Trans-Canada Highway from Port Mann to Horseshoe Bay, Horseshoe Bay to Squamish, Highway 4 from Parksville to Alberni, Highway 19 from Nanaimo to Campbell River, Trans-Canada Highway from Nanaimo to Shawnigan Lake, all had new reflectors installed.

Statistics for Work Completed to the end of March, 1982:

Painting	
Centreline, Edge and Lane Lines Painted	16 471 km
Pre-lining	1 314 km
Curb Painting	1.5 km
Crosswalks Painted	47
Arrows Painted	721
Stop Lines Painted	260
Advance Markings Painted	14
Parking Stalls and Digits Painted	112
R.C.M.P. Surveillance Lines Painted	1
Traffic Islands Painted	798
Thermoplastic	
Centreline, Edge and Lane Lines Painted	41 km
Plastic Laid	9 389 m^2
Arrows	1 282
Crosswalks	480
Stop Lines	323
R.C.M.P. Surveillance Lines	218
Speed Cont. Lines	6
No-Park Zones	1
Advance Markings	23
Catseye and Reflective Road Markings	
Catseye Castings	255
Catseye Rubber Inserts	4 670
Guardrail Delineators	500
Reflective Road Markings	45 874
Material Usage	
Yellow Centreline Paint	551 291 L
White Centreline Paint	251 286 L
Glass Bead	462 431 kg
Yellow Thermoplastic	4 201 kg
White Thermoplastic	103 635 kg
Yellow Plastix	53 m^2
White Plastix	58 m^2

Work Activities Performed by Ministry Maintenance Crews, 1981/82

Activity #	Description	Man-Hours	Accomplishment	Average Unit Cost	Total Cost
100	Permanent Hand Patch	78,573.3	10,644.9 m^3	180.16	1,917,809
101	Machine Patch	65,569.7	56,459.1 m^3	77.88	4,397,370
102	Surface Treatment	3,641.3	325.2 m^2	720.00	234,145
103	Crack Seal	6,977.0	1,086.1 lane km	142.67	154,963
104	Pavement Burning	619.0	25.9 lane km	2,430.65	62,954
105	Temporary Hand Patch	76,920.4	8,583.0 m^3	206.50	1,772,453
106	Skin Hand Patch	9,611.7	844.1 m^3	249.22	210,[illegible]
111	Grading	148,787.3	684,609.4 pass km	11.80	6,032,530
112	Dust Control	11,454.0	10,806.6 pass km	263.40	2,846,557
113	Regravel Roads	92,686.7	529,680.7 m^3	6.80	3,607,017
120	Regravel Shoulders	68,186.3	255,432.8 m^3	9.67	2,471,246
121	Grade Shoulders	15,594.6	44,260.1 pass km	14.55	644,119
122	Sundry Shoulder Maint.	6,145.6	15,199.3 m^3	11.57	175,859
123	Curb Maintenance	2,822.4	29,683.9 m	2.16	64,371
130	Road Base Repair	51,558.8	175,449.7 m^3	9.80	1,719,583
131	Rail Crossing	2,730.6	2,708.8 man-hours	41.86	113,398
139	Other Surface	6,855.7	6,823.2 man-hours	51.20	349,395
200	Ditch Clean	135,912.3	1,283,863.3 m	3.88	4,986,119
201	Grader Ditch	7,240.9	4,223.4 km	74.65	315,290
202	Culvert Maintenance	41,849.8	38,751.7 culverts	23.70	918,654
203	Catch Basins	7,087.9	13,780.0 catch basins	11.29	155,649
204	Culvert Replacement	20,904.7	2,417.6 culverts	417.04	1,008,323
209	Other Drainage	17,151.4	17,137.7 man-hours	25.91	444,142
220	Area Mowing	9,716.7	5,074.4 ha	70.17	356,118
221	Hand Brush	71,821.9	71,768.8 man-hours	17.76	1,274,818
222	Machine Brushing	13,752.5	2,979.3 ha	382.47	1,139,494
223	Swath Mowing	23,965.3	67,024.3 pass km	12.36	828,559
230	Gardening	31,545.0	31,328.2 man-hours	24.07	754,109
231	Shoulder Sterile	3,218.9	2,334.6 shoulder km	45.10	105,295
232	R/W Seeding	10,111.0	3,518.6 ha	325.75	1,146,198
233	Refertilize	1,341.0	436.2 ha	316.17	137,917
234	Hydroseeder Mulching	2,920.0	317.7 ha	1,136.85	361,180
235	Weed & Brush	14,401.5	554.1 ha	692.93	383,954
239	Other Vegetation	4,729.6	4,728.6 man-hours	25.77	121,884
250	Road Litter	39,002.7	117,057.1 shoulder km	5.99	701,335
251	Barrels & Areas	43,720.1	143,134.5 barrels	7.04	1,008,449
252	Appliances	11,841.0	60,550.5 appliances	5.75	348,418
253	Rock Debris	20,820.6	20,812.9 man-hours	22.98	478,462
254	Road Surface Clean	14,356.8	31,734.1 pass km	15.95	506,254
255	Rock Scaling	4,467.3	4,502.3 man-hours	27.12	122,142
256	Hand Surface Clean	9,769.2	9,735.0 man-hours	16.61	161,727
257	Street Surface Clean	12,781.4	32,463.7 pass km	13.35	433,597
259	Other Debris	9,164.1	9,140.1 man-hours	22.65	207,087
300	Truck Plow	195,796.7	4,851,890.8 plow km	1.27	6,165,416

Work Activities Performed by Ministry Maintenance Crews, 1981/82—Continued

Activity #	Description	Man-Hours	Accomplishment	Average Unit Cost	Total Cost
301	Sanding	216,838.1	547,637.6 m^3	22.15	12,132,007
302	Chemical	31,286.2	52,725.1 m^3	99.18	5,229,711
303	Patrol	177,341.2	4,204,916.0 km	1.05	4,429,676
304	Grader Plow	79,987.4	721,703.5 plow km	6.22	4,493,529
305	Ice Blading	11,553.0	105,527.2 plow km	5.42	572,829
306	Misc. Snow Cleaning	54,631.8	55,252.5 man-hours	44.13	2,438,814
307	Drainage Thaw	16,824.7	16,550.7 man-hours	[illegible]	404,924
308	Stock Salt	7,806.6	87,370.1 tonnes	70.67	6,174,838
309	Snowfences	1,843.7	30,550.9 m	2.20	63,129
310	Plowboards	5,100.4	9,261.4 plow boards	26.42	244,694
311	Grader Wing	42,016.4	319,839.2 plow km	7.16	2,290,768
312	Snow Blowing	6,223.3	6,223.3 man-hours	39.50	246,244
319	Other Winter	36,045.0	36,114.5 man-hours	26.92	972,157
400	Signs	122,318.4	204,709.4 posts	16.08	3,292,024
404	Posts (Yard)	8,191.3	23,360.9 posts	5.74	134,239
405	Sign Fabrication	4,196.5	4,201.0 man-hours	17.01	71,450
430	Pavement Marking	6,033.5	60,732.8 m^2	3.04	184,980
431	Road Stud Installation	623.4	4,291.0 studs	8.68	37,261
432	Line Paint	32,367.6	16,970.9 pass km	159.80	2,712,115
433	Reflector Installation	3,920.2	54,172.0 no. reflectors	2.93	158,986
434	Curb Paint	322.4	32,095.0 lineal m	.27	8,699
435	Mark Eradication	929.1	6,323.4 m^2	2.70	17,088
436	Prelining	7,367.1	1,464.4 pass km	65.97	101,011
437	Plastic Line	566.0	50.5 pass km	966.83	48,825
438	Plastic Line	3,079.3	10,156.0 m^2	13.62	138,354
439	Other Signs & Marks	23,676.6	23,543.0 man-hours	18.93	445,925
450	Signal Maintenance	6,822.4	1,186.0 intersections	141.84	168,228
451	Signal Repair	14,151.3	2,886.0 intersections	144.[illegible]	415,520
452	Electrical Patrol	2,141.2	37,402.6 km	1.27	47,734
453	Overhead Message Sign	580.7	580.7 man-hours	21.64	12,572
459	Other Traffic Control	1,512.5	1,512.5 man-hours	26.85	40,622
460	Light Maintenance	4,605.1	3,506.5 No. Poles	41.65	146,055
461	Light Repair	16,728.9	7,110.5 No. Poles	100.65	715,707
465	Other Light	1,454.8	1,459.3 man-hours	48.09	70,191
466	Generator Maintenance	2,027.7	431.0 generators	115.06	49,593
467	Generator Repair	2,489.6	344.0 generators	158.52	54,532
469	Other Generator	89.4	89.4 man-hours	24.89	2,226
470	Service Equip. Maint.	1,214.0	153.0 units	173.62	26,564
471	Service Equip. Repair	1,228.6	171.0 units	196.46	33,596
475	Control Device Repair	6,227.0	2,625.0 devices	37.40	98,176
476	Control Device Mfg.	528.3	162.0 devices	52.73	8,543
479	Other Controls-Devices	597.9	597.9 man-hours	50.31	30,082
500	Bridge Clean	22,218.4	1,908.8 bridges	200.78	383,263
501	Bridge Rail Paint	9,919.4	15,831.9 m	11.86	187,837

Work Activities Performed by Ministry Maintenance Crews, 1981/82—Continued

Activity #	Description	Man-Hours	Accomplishment	Average Unit Cost	Total Cost
502	Bridge Structure Paint	9,487.8	8,103.8 l	41.05	332,676
503	Sand Blast	8,456.0	2,428.5 tonnes	143.00	347,232
504	Stream Channel	7,515.4	7,539.4 man-hours	25.85	194,900
505	Deck Surface Repair	3,886.4	1,367.2 m^2	120.88	165,271
506	Bridge Repair Maint.	102,634.5	102,924.2 man-hours	30.24	3,112,522
507	Bridge Inspection	7,571.1	2,594.5 bridges	58.74	152,425
508	Bailey Bridge Maint.	5,453.2	8,119.5 pieces	16.14	131,073
509	Hand Paint	3,699.3	1,667.4 l	43.08	71,842
510	Tunnel Maintenance	6,128.5	6,128.5 man-hours	29.99	183,806
513	Deck Oiling	2,175.7	61,102.5 m^2	.73	44,840
514	Plumbing	5,762.7	5,762.7 man-hours	20.04	115,537
515	Building Maintenance	19,491.7	19,491.7 man-hours	27.57	537,571
516	Misc. Carpentry	28,942.2	28,921.7 man-hours	20.14	582,557
517	Concrete Overlay	9,199.3	13,328.0 m^2	37.74	503,058
518	Scarifying	1,035.0	7,801.0 m^2	12.73	99,331
520	Con. Guard Rail Maint.	7,813.3	59,625.0 No. pieces	3.31	197,423
521	Fence Repair	6,882.1	85,379.8 metres	2.03	173,948
522	Cattleguard Repair	4,066.9	473.0 cattleguards	262.15	124,000
523	Steel & Timber Guardrail	1,623.9	6,350.1 m	5.28	33,535
524	Special Fence	1,285.2	1,285.2 man-hours	22.49	28,916
529	Other Structure Maint.	17,780.1	17,755.1 man-hours	37.25	661,449
560	Screen Stock.	36,984.7	413,673.6 m^3	9.88	4,086,948
561	Pit Prep. Clean-up	22,352.5	22,267.7 man-hours	77.49	1,725,631
562	Crush 38/76 mm	1,506.4	127,131.0 mm	1.10	140,250
563	Crush 19 mm	15,670.7	817,994.5 mm	1.68	1,374,402
564	Crush 13/16 mm	12,145.4	329,292.8 mm	1.82	602,029
565	Asphalt Mix	5,545.3	20,869.8 m^3	47.51	991,599
567	Grade Premix	961.1	3,081.7 m^3	29.21	90,042
568	Gravel Stockpiling	3,353.4	104,304.4 m^3	5.16	538,923
569	Other Materials	6,705.7	6,705.7 man-hours	89.99	603,452
570	Ferry Operation	713.4	713.4 man-hours	131.19	93,596
571	Ferry Maintenance	5,364.2	5,364.2 man-hours	29.36	157,502
572	Dock Maintenance	33,119.3	33,124.8 man-hours	98.41	3,259,881
579	Other Ferry & Dock	9,134.6	9,120.6 man-hours	102.06	930,912
580	Equipment Service	127,273.6	47,833.6 no. units	38.03	1,819,272
581	Equipment Repair	36,144.2	7,537.1 no. units	92.91	700,276
582	Mechanical Travel	22,447.1	5,874.0 no. units	71.80	421,760
583	Fueling	10,697.6	7,514.5 no. units	30.29	227,682
588	Equipment Rental	.0	12,811.3 units	493.43	6,321,522
590	Radio Repair	17,477.8	5,273.5 units	70.08	369,596
591	Radio Installation	4,380.6	1,199.0 no. units	68.05	81,594
592	Repeater System	2,634.3	507.0 no. repeaters	95.73	48,537
600	Supervision	594,582.9	594,344.6 man-hours	15.60	9,275,128
601	Training & Safety	150,108.2	150,223.9 man-hours	15.97	2,399,311
602	Vacation	852,667.0	853,423.4 man-hours	12.05	10,289,918

Work Activities Performed by Ministry Maintenance Crews, 1981/82—Continued

Activity #	Description	Man-Hours	Accomplishment	Average Unit Cost	Total Cost
603	Sick Leave	190,700.0	190,817.0 man-hours	11.93	2,276,621
604	W.C.B.	22,176.9	22,183.9 man-hours	12.03	266,946
605	Special Leave	23,323.9	23,308.9 man-hours	12.24	285,393
606	Stand-by	47,566.2	47,570.4 man-hours	12.21	580,848
609	Equipment Hauling	55,819.3	56,836.4 man-hours	43.47	2,470,759
610	Light Duties	3,544.1	3,544.1 man-hours	12.09	42,848
611	Travel 4 Hours +	25,908.0	26,507.7 man-hours	77.89	2,064,883
612	Traffic Patrol	122,349.2	122,843.7 man-hours	15.18	1,866,130
613	Yard Maintenance	129,643.6	129,584.7 man-hours	17.16	2,224,174
614	Stock Control	158,911.4	159,250.9 man-hours	20.54	3,272,515
615	Camp Operation	30,542.8	48,771.1 meals	16.04	782,327
616	Tending	68,816.0	68,689.9 man-hours	16.78	1,152,741
619	Other Overhead	23,590.0	22,598.0 man-hours	62.43	1,410,879
651	Complaints	16,553.8	16,546.3 man-hours	14.74	244,009
653	Draft & Calculating	124,647.4	124,358.9 man-hours	12.89	1,604,110
654	Maint. Mgmt. Office	78,249.4	78,230.1 man-hours	13.20	1,032,747
655	Maint. Mgmt. Field	22,127.0	22,183.0 man-hours	16.39	363,631
656	Permits & Referrals	31,906.6	12,624.7 permits	34.28	432,671
658	Subdivisions	70,439.9	7,752.5 subdivs. & LUC	124.03	961,572
660	Survey Project	105,923.7	105,878.7 man-hours	14.33	1,517,715
661	Avalanche Management	14,769.2	14,797.7 man-hours	21.97	325,245
666	District Admin.	321,650.0	321,808.3 man-hours	16.06	5,170,500
668	Survey Other	93,204.3	93,188.8 man-hours	13.84	1,290,597
670	Secretarial	230,698.6	232,732.5 man-hours	12.70	2,955,733
671	General Accounting	40,372.0	238,528.1 100$ monthly	2.00	473,349
672	Payroll & Personnel	88,765.2	463,921.8 100's of man-hours processed	2.27	1,053,159
673	Accounts Payable	82,277.0	96,805.3 100's time cards	10.17	984,600
674	Sec/Regulations	789.0			9,122
675	Term/Data Entry	17,524.6	1,128,217.1	.19	215,239
679	Other District & Tech.	19,612.2	19,621.8 man-hours	16.60	325,790
700	Clearing & Grubbing	23,394.5	627.6 ha	2,716.57	1,704,923
701	Rock Blasting	3,444.3	111,471.5 m^3	3.01	336,499
702	Road Bed Construction	64,729.1	2,918.6 km	3,034.00	8,855,056
703	Road Widening	36,977.1	1,140.1 km	2,357.89	2,688,232
704	Shoulder Widening	24,543.7	500.2 km	2,593.16	1,297,101
705	Ditch Construction	21,537.3	207,563.1 m	6.34	1,316,124
706	Culvert Installation	25,016.5	23,831.3 m	69.78	1,663,117
707	Multi-Plate	4,467.2	347.2 m	876.19	304,215
708	Machine Paving	18,052.7	78,760.9 tonnes	53.39	4,205,162
709	Road/Pulvi Mix	6,268.8	385.9 km	1,442.65	556,722
710	Guardrail Installation	26,685.1	24,996.6 no. pieces	91.94	2,298,322
711	Seal Coating	11,889.2	292.7 km	2,683.00	785,316
712	R/W Landscaping	6,148.6	172.0 ha	1,723.87	296,506
713	R/W Fencing	17,704.1	217,508.9 m	5.05	1,099,618

Work Activities Performed by Ministry Maintenance Crews, 1981/82—Continued

Activity #	Description	Man-Hours	Accomplishment	Average Unit Cost	Total Cost
714	Rest Area Development	18,052.7	18,154.2 man-hours	29.77	540,515
715	Retaining Wall	3,440.9	1,565.9 m^2	119.78	187,574
716	Rip Rap	3,664.4	27,121.8 m^3	10.81	293,446
717	Curb & Gutter	2,924.1	1,070.1 m	185.86	198,892
718	Manhole Installation	1,503.9	40.0 number	1,024.32	40,973
719	Cattleguards	2,115.9	88.0 number	1,436.44	126,407
720	Chainlink Fence	1,365.6	2,240.1 m	48.80	109,319
721	Yard Betterment	8,043.0	8,566.6 man-hours	30.73	263,301
722	Building Construction	13,393.2	13,393.2 man-hours	223.93	2,999,187
723	Dock Construction	6,344.0	6,344.0 man-hours	1,798.71	11,411,051
724	Bridge Construction	74,129.2	74,097.8 man-hours	53.92	3,995,367
725	Rest Area Application	742.8	110.0 number	1,393.81	153,870
726	Electrical Const.	41,953.8	41,947.3 man-hours	33.64	1,411,435
727	Gravelling	83,559.5	1,730,503.7 m^3	6.04	10,456,304
728	Asphalt Curb	1,267.6	4,596.2 m	6.42	29,509
729	Traffic Islands	2,265.8	3,367.2 m^2	53.35	179,657
730	Shoulder Paving	2,624.4	6,768.9 tonnes	42.39	286,997
731	Shoulder Stabilization	1,260.9	101.5 shoulder km	502.17	50,971
732	Shoulder Surf. Treat.	368.0	11.8 shoulder km	1,954.57	23,064
733	Rock Drilling	4,984.6	47,515.5 m	8.85	420,721
734	Slope Surface	1,846.0	3,540.0 m^2	19.75	69,924
735	Gravel Treatment	1,281.7	36.6 km	4,354.18	159,363
737	690 mm Guardrail Fab.	8,711.1	5,329.0 no. pieces	73.91	393,885
738	Road Stabilization	242.5	60.7 km	2,015.00	122,311
799	Other Projects	37,385.1	37,329.3 man-hours	65.26	2,436,454
810	Benkelman Beam	792.2	225.5 number	55.85	12,596
900	Flood Control	74,040.2	74,282.5 man-hours	39.67	2,947,[illegible]
901	Slide Removal	34,007.7	34,269.4 man-hours	35.70	1,223,596
902	Snow Slides	8,438.3	8,438.3 man-hours	51.40	433,810
903	Winter Repair	10,340.6	10,304.6 man-hours	43.96	453,042
904	Island Maintenance	7,004.7	7,004.7 man-hours	18.17	127,304
909	Other E.O.M.	16,526.2	16,587.7 man-hours	30.05	498,545
996	Material Write-off	.0	431,025.1 number $	1.00	431,028
998	Stock Transfer	.0	6,091.0 number	347.48	2,116,525
999	District Overhead	366.4	295,151.5 number $	12.94	3,819,432

Road Feature Inventory
Summer Classifications—District Totals of All Classes

Feature	Measure	Provincial Total	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6
SURFACE TYPE	Lane km							
Hot Mix		27,105.1	4,238.3	5,510.5	4,063.7	6,361.3	2,346.9	4,584.4
Cold Mix		9,993.8	595.1	4,012.6	2,840.0	305.5	172.9	2,067.7
Concrete		49.0	46.3		1.8			.9
Treated		1,257.7		102.4	568.1	229.6	184.3	173.3
Gravel		40,715.3	986.9	10,282.7	4,078.5	17,632.2	5,013.9	2,721.1
Dirt		6,277.5	22.1	1,890.7	768.4	3,239.6	318.1	38.6
Other		1,132.2	174.0	232.8	581.1	70.9	71.2	2.2
TOTAL		86,530.6	6,062.7	22,031.7	12,901.6	27,839.1	8,107.3	9,588.2
TOTAL	Road km	43,852.9	2,688.2	11,432.5	6,924.5	14,000.7	4,142.1	4,664.9
PROFILE	Lane km							
4-Lane Dvd.		1,109.5	885.3	65.5			17.6	141.1
4-Lane Undvd.		1,661.8	602.4	401.7	35.2	157.4	23.6	441.5
2-Lane		79,749.1	4,286.7	20,160.2	11,659.3	27,067.2	7,780.6	8,795.1
1-Lane		2,930.7	107.9	1,205.4	654.3	560.7	208.4	194.0
Other		1,079.5	180.4	198.9	552.8	53.8	77.1	16.5
TOTAL		86,530.6	6,062.7	22,031.7	12,901.6	27,839.1	8,107.3	9,588.2
SHOULDERS	km							
-1 m paved		3,866.7	744.5	282.6	420.8	896.2	837.0	685.6
-1 m treated		641.2	17.5	23.3	13.9	48.4	535.6	2.5
-1 m gravel		14,056.4	1,349.7	3,696.9	3,186.7	1,129.4	898.4	3,795.3
+1 m paved		4,581.1	1,064.4	702.4	1,125.1	995.9	132.4	560.9
+1 m treated		3,822.1	343.1	1,417.5	571.0	1,082.7	341.9	65.9
+1 m gravel		13,196.5	1,188.6	3,717.1	2,426.9	3,291.4	698.7	1,873.8
DITCHES	km	47,011.6	2,481.9	8,988.0	5,535.5	18,910.0	5,437.9	5,658.3
CULVERTS	Each							
Entrance		63,465	6,869	9,953	4,821	17,658	2,968	21,196
Road Way		83,322	6,210	15,610	13,446	23,105	8,868	16,083
DUST SITES	Each	18,624	1,334	5,623	2,248	4,056	2,987	2,376
SIGNS	Each							
Structure		1,576	734	417	61	197	35	132
Post		90,181	19,873	19,407	14,527	15,363	5,983	15,028
GUARDRAIL	m							
Steel & Wood		79,395.0	11,944.0	29,283.0	8,165.0	9,742.0	15,204.0	5,057.0
No Post		789,621.0	278,553.0	118,346.0	195,500.0	51,209.0	39,773.0	106,240.0
REST AREAS	Each							
Lay By		802	133	200	286	126	43	14
Rest Stop		215	9	36	65	50	27	28
LITTER BARREL	Each	2,519	224	676	518	655	246	200
SPECIAL LANES	km	1,267.2	270.2	285.8	209.1	279.8	73.6	148.7
DELINEATORS	Each	37,784	11,837	6,084	5,261	4,921	3,887	5,794
MOWING								
Swath	km	48,591.0	3,519.6	10,641.8	7,403.6	14,687.0	4,416.3	7,922.7
Area	ha	774.0	648.0	25.0	15.0	10.0		76.0
RAILROAD X	Each	780	90	185	170	177	45	113
CATTLE GUARD	Each	1,577	13	877	243	381	60	3
TUNNELS AND SNOW SHEDS	km	54.0	17.0	12.0	12.0	3.0		10.0
CATCH BASINS	Each	9,413	4,174	1,164	978	1,448	299	1,350
CURB & GUTTER	m	1,041,423	272,925	228,741	153,763	168,251	45,666	172,077
MANHOLES	Each	1,647	789	297	54	217	86	204

REPORT OF THE DIRECTOR OF EQUIPMENT SERVICES

E. A. Lund, P.Eng.

EQUIPMENT SECTION

The Ministry equipment fleet was maintained at a high level of availability at less than inflation costs due to the effectiveness of the preventive maintenance program and the purchase in recent years of equipment more suitable to Ministry needs. In particular, the conversion to diesel powered snow plow trucks has greatly reduced the downtime experienced from wet ignition systems on gasoline powered snow plow trucks.

The fleet was enlarged with the assimilation of 83 vehicles from the Transportation Department of the Ministry, only the Motor Carrier Branch vehicles are not included in the Ministry fleet. There were 156 large trucks, 241 transportation vehicles, 27 graders, 28 loaders, 19 farm-type tractors and numerous items of small equipment and tools purchased. Two large special purpose units were purchased, a 40-ton crane for bridge repair and a 42-inch self-propelled concrete scarifier for bridge resurfacing.

The equipment management system is now fully implemented at the garage level and only the replacement criteria portion of the system remains to be implemented. It is fully designed, but must still be programmed. For the past year the provincial average shop rate was $26.06 per mechanic hour. The total manhours utilized by the garages was 1,136,457 manhours of which 59 per cent was productive and 41 per cent overhead such as holidays, supervision, stock control, training, etc.

Fuel consumption was:

Gasoline	19 912 000 litres
Diesel	15 107 000 litres
Oil	745 000 litres

There were 106 requests for approval to hire transportation units and 684 requests for approval to hire construction equipment at other than standard rates.

This Branch in cooperation with the Purchasing Commission held 11 auctions of used and surplus equipment in seven locations in the province disposing of 912 pieces of equipment.

The Langford fabrication shop manufactured 30 Ministry tailgates, custom fitted 14 larger trucks with underbody plows, hydraulics and front mounts for snow plows. The shop also fabricated underbody plows, front snow plow mounts and hydraulic systems for 182 smaller dump trucks. It also outfitted a large 6 × 6 Mack truck with front and underbody plows as well as a large version of the twin chain sander for use in the Pine Pass. To facilitate the safe and standard method of lifting reinforced guardrail sections, 90 guardrail lifters were fabricated and supplied to district maintenance crews.

The electronic sander control program was re-evaluated with the previous 24 units reconstructed and successfully utilized in 1981/82 winter. A newer model control was designed and tested with 100 per cent reliability for two months. Further development is required but the system is close to fleet acceptability.

Energy conservation was continued by further fleet use of diesel engines. The switch to alternative fuels was delayed by the difficulty in obtaining a suitable propane dispenser for fleet fueling.

An inventory, as of March 31, 1982, of active Ministry equipment by classification follows:

HIGHWAYS DIVISION
INVENTORY OF MINISTRY OF TRANSPORTATION AND HIGHWAYS EQUIPMENT FLEET AS OF MARCH 31, 1982

	Class	Description	Active Units (Incl. B.C. Ferries)
A.	1100	Cars	283
B.	1200	Plows	1,876
C.	15XX	Compressors	111
D.	1611–1615	Fork Lifts	78
	1621–1625	Cranes	6
	1630	Bridge Inspection Units	1
	2100	Excavators	37
E.	18XX	Light Plants	74
F.	001X	Truck Cranes	191
	0020	Personnel Lifts	38
	0030	Wreckers	13
	0033	Electrical Signs	94
	0070	Garbage Packer	41
G.	2010	Self-propelled Brooms (pickup)	26
	2020	Towed Brooms	24
	2015	Self-propelled Brooms (non-pickup)	25
H.	94XX	Transportation Light Trucks	1,865
J.	25XX	Asphalt and Paving Equipment	130
	0050	Pavement Burners	3
	0060	Distributor	39
K.	28XX	Crushing and Screening Equipment	108
L.	30XX	Graders	317
	3100	Towed Graders	8
M.	3510	Sanders	1,065
N.	40XX	Rubber Tired Tractors	207
O.	0001	Hydroseeder	5
	0002	Centreline Marker	11
	0003	Tunnel Washer	1
	0004	Snow Blower (Truck)	0
	3550	Snow Blower (quick slip on)	31
	0040	Water Tank	154
	0080	Auger Drill	20
	0081	Diamond Drill	8
	1651 & 1652	Pile Drivers	3
	5600	Self-propelled Horizontal Drill	1
	5700	All-terrain Vehicle	2
	5800	Air Track Drill	2
	6001	Skidoo	3
	6002	Snowmobile	9
	6003	Motorcycle	4
	6010	Hoist	5
	6020	Sprayer	14
	6021	Flame Thrower	10
	6022	Scale	6
	6023	Post Driver	3
	6024	Steamer	19
	6025	Road Planer	2
	6030	Scraper	7
	6090	Miscellaneous	98
	6093	Medium-Large "O" Equipment	1
P.	46XX	Roller	123
	4700	Hand Tampers	191

HIGHWAYS DIVISION
INVENTORY OF MINISTRY OF TRANSPORTATION AND HIGHWAYS EQUIPMENT FLEET AS OF MARCH 31, 1982—*Continued*

	Class	Description	Active Units (Incl. B.C. Ferries)
Q.	50XX	Crawler Tractors	57
R.	44XX	Loaders and Backhoes	247
S.	7000–9320	Heavy Trucks	1,629
T.	6500 & 6501	Lowbed Highboy Trailers	33
	6502	Tilt and Flatdeck Trailers	47
	6503	Utility Trailers	126
	6510–6512	Unheated Storage Trailers	69
	6520–6522	Kitchen, Washcar Trailers	43
	6523–6525	Office, Sleeper Trailers	167
	6526–6528	Assembly Trailers	50
	6530	Miscellaneous Trailers	1
U.	6250	Licensed Non-rental	30
V.	6200	Shop Equipment	1,929
W.	3302–3303	Rock Breakers, Brush Saws	133
Z.	3300	Brush Cutters	22
	3301	Chipper	8

TECHNICAL STORES

There were 26 theodolites, 20 surveyor levels and 15 electronic distance measuring devices purchased during the year. Economies of nearly 20 per cent were realized in the purchase of the survey equipment by the formulation of standard specifications which allowed open tendering by all suppliers.

Repairs were made to many pieces of laboratory equipment and several items of special technical equipment were fabricated.

The inventory of surveying instruments is:

417	Transits
418	Levels
52	Electronic Distance Measuring Devices

LANGFORD SIGN SHOP

The Ministry of Transportation and Highways sign shop is located in Langford, 15 kilometres west of Victoria. It manufactures all the regulatory, warning, guidance, parking, construction and maintenance signs for provincial highways.

During the year considerable labour was required to convert the sign blanks and the film positive layouts to standard metric sizes. The silk screens were converted from silk to polyester and from water stencils to direct emulsion. A mercury halide exposure unit was purchased to facilitate the more efficient cutting of stencils. The end result of the conversion will be screens and stencils that will outlast the previous system by five times with less stencil deterioration, a neater product and labour saving operations.

In the previous year the sign order backlog was about six months, this year it was reduced to about two and a half months and the goal for next year is a six-week delivery.

The sign shop shipped the following volumes of signs during the year:

Size	Number
To 0.09 Square Metres	11,511
To 0.23 Square Metres	6,610
To 0.51 Square Metres	19,956
To 1.07 Square Metres	5,308
To 1.62 Square Metres	1,069
To 3.20 Square Metres	735
Over 3.21 Square Metres	105
Total pieces	45,294

Plus 13,234 delineator tabs (8 cm × 20 cm).

The total square footage of all signs shipped was 18 087 square metres.

The year was completed with only one third part labour stoppage and no other labour problems. There were 26,462 manhours employed in the sign shop.

FERRIES

Service was provided on 35 routes under the jurisdiction of the Ministry. This was accomplished by a fleet consisting of 24 major vessels, seven reaction ferries, four cable ferries, five subsidized ferries and four miscellaneous ferries. There are also two tugboats and four barges for emergency purposes.

The onset of this year marked the successful and well accepted implementation of the ferry management information system. The objectives of the system are to provide basic management decision making information concerning ferry traffic statistics and trends, vessel performance data (such as trips logged, operating hours, kilometres travelled, downtime, fuel consumption, etc., operating and maintenance costs, manpower utilization factors), and detailed labour and costs analysis of all ferry operations.

TRAFFIC

The fleet carried 3,944,009 vehicles and 8,851,871 passengers during the year. The totals were 3,896,018 and 8,909,481 respectively the previous year.

OPERATION

A contract was let for the construction of a 70-car, double ended ferry for the Nanaimo–Gabriola Island route.

The rail car and passenger vessel, *Princess of Vancouver*, was purchased from Canadian Pacific and is now in the process of conversion to a vehicle and passenger ferry.

REVENUE

Alert Bay	$ 266,739.30
Comox-Powell River	1,704,401.91
Cortes Island	108,288.65
Denman Island	220,601.10
Gabriola Island	521,948.17
Hornby Island	73,195.40
Quadra Island	410,380.70
Queen Charlotte Islands	123,461.20
Texada Island	201,474.90
Thetis Island	108,643.50
Woodfibre	20,907.00
TOTAL	$3,760,041.83

RECORD OF FERRY TRAFFIC FISCAL YEAR 1981/82

Route	Number of Leg Trips	Number of Passengers	Passengers Including Drivers	Number of Autos	Number of Trucks	Dangerous Cargo (Trucks)	Logging Trucks	RV's Less Than 6 Metres	RV's Greater Than 6 Metres	Trailers Semis	Motor Buses	Motor-cycles	Other	Total Vehicles
Albion-Fort Langley	61,842	897,174	1,898,334	943,710	27,726	—	6	2,553	1,429	7,904	422	16,457	953	1,001,160
Alert Bay	14,305	163,506	230,859	61,121	3,328	84	13	1,024	378	796	148	289	172	67,353
Arrow Lake (Upper)	14,481	136,604	268,573	102,484	6,415	322	1,866	6,951	7,258	3,943	136	1,492	1,102	131,969
Arrow Park	14,686	19,718	35,783	13,074	1,160	30	176	164	496	493	229	52	191	16,065
Barnston Island	70,394	95,783	184,844	54,763	27,974	198		1,833	143	1,689	1,035	1,184	242	89,061
Big Bar	4,672	2,226	3,862	66	975	42		138	29	26		75	285	1,636
Boston Bar	131,904	157,633	247,195	42,878	44,749	1		205				1,530	199	89,562
Castlegar	73,788	386,691	856,383	301,373	160,409	10	6	1,062	423	1,734	1,440	2,959	276	469,692
Clayhurst	28,856	33,919	68,943	25,760	5,831	40	3	245	165	459	25	97	2,399	35,024
Comox-Powell River	3,182	158,811	252,242	79,299	3,025	1		4,834	1,436	3,062	175	1,574	25	93,431
Cortes Island	4,338	42,857	74,941	28,191	1,326	11	15	1,119	372	583	205	212	50	32,084
Denman Island	15,087	249,385	455,600	186,323	7,005	136	704	6,119	2,747	1,228	316	1,513	124	206,215
Dodge Cove (Subsidy)	474	2,126	2,126											N A
Fort Nelson Hover	2,444	1,918	5,063	45	2,267	57		29	30	473	2	32	210	3,145
François Lake	16,933	178,270	325,142	122,523	11,927	318	3,948	415	1,636	5,192	261	411	241	146,872
Gabriola Island	12,902	433,464	730,142	281,122	7,889	289	57	1,364	727	1,873	167	2,995	195	296,678
Glade	78,520	91,165	187,436	92,818	857	27	5	123	35	227	1,681	289	209	96,271
Harrop	85,224	149,480	324,702	163,654	4,120	110	76	989	660	793	2,132	1,291	1,397	175,222
Hornby Island	10,346	127,160	221,196	81,374	3,174	70	11	4,598	992	2,316	199	1,211	91	94,036
Isle Pierre	3,820	4,070	6,889	937	1,804			15	5	36		4	18	2,819
Kootenay Lake	9,296	211,671	383,537	92,431	51,023	1	127	7,964	6,592	11,005	489	2,097	137	171,866
Lasqueti Island (Subsidy)	1,438	22,740	22,740											N A
Little Fort	14,408	12,500	19,694	2,671	4,140	10	3	16	5	96	10	43	200	7,194
Lytton	22,052	56,391	84,054	9,594	15,798	27	3	147	91	35	1,445	266	257	27,663
Marguerite	22,480	26,798	44,209	6,219	10,645	24	29	107	22	222	13	80	50	17,411
McLure	19,138	31,814	51,390	9,098	9,119	4		324	59	437	7	247	281	19,576
Needles	29,579	205,748	332,517	100,488	5,986	252	717	8,466	5,836	1,298	926	1,608	1,192	126,769
Quadra Island	15,148	473,640	765,649	269,610	6,417	109	386	3,630	3,200	4,117	237	4,761	142	292,009
Queen Charlotte Island	6,012	58,741	121,731	56,031	4,499	25	3	457	305	1,036	506	35	93	62,990
Shuswap Lake (Subsidy)	358	954	1,895	166	368			48		189	1	4	165	941
Texada Island	7,778	108,972	195,121	79,230	2,905	215	5	1,532	220	1,087	87	707	161	86,149
Thetis Island	20,634	135,838	198,986	60,469	1,777	128	67	18	31	285	31	220	122	63,148
Usk	21,435	33,196	46,325	7,129	5,441	8	3	38	4	9	4	439	54	13,129
Woodfibre-Darrell Bay	5,798	196,899	203,768	2,174	3,369	254	34			790		21	227	6,869
Totals	843,741	4,907,862	8,851,871	3,276,225	443,448	2,803	8,263	56,527	35,326	53,433	12,329	44,195	11,460	3,944,009

FERRIES ROUTE USEAGE 1981/1982

Route Name	Fuel Consumed (1000's L)	Total Manhours	Cost Per Trip	Vessel Capacity Used (Per Cent)
Albion-Fort Langley	471	92,298.6	30.31	74.3
Alert Bay	1 008	59,272.5	111.17	40.08
Arrow Lake (Upper)	947	61,977.9	107.32	27.1
Arrow Park	21	6,281.5	6.19	16.4
Barnston Island	55	19,855.1	4.63	51.7
Big Bar	0	3,680.0	12.78	23.8
Boston Bar	0	22,014.0	2.17	84.3
Castlegar	38	14,557.3	3.56	26.9
Clayhurst	52	13,895.5	9.08	19.5
Comox-Powell River	3 156	151,062.5	1,201.77	44.5
Cortes Island	393	30,087.3	245.55	49.9
Denman Island	343	53,457.2	74.33	52.2
Dodge Cove (Subsidy)	0	0	33.67	0
Fort Nelson Hover	31	8,427.5	106.02	57.6
François Lake	622	59,217.5	71.29	29.8
Gabriola Island	980	88,772.0	142.95	50.0
Glade	33	10,804.0	2.08	16.0
Harrop	45	12,224.2	2.54	21.6
Hornby Island	238	39,778.5	80.15	51.2
Isle Pierre	0	2,411.0	7.88	49.9
Kootenay Lake	648	88,356.9	169.71	59.5
Lasqueti Island (Subsidy)	0	0	127.26	0
Little Fort	4	3,797.0	5.13	33.0
Lytton	0	11,624.0	7.43	87.4
Marguerite	0	5,469.5	3.79	52.0
McLure	2	3,841.5	3.10	65.8
Needles	286	48,409.5	30.79	17.1
Quadra Island	718	89,781.0	115.82	67.7
Queen Charlotte Islands	275	25,739.5	126.46	47.4
Shuswap Lake (Subsidy)	0	0	67.04	0
Texada Island	967	74,518.0	255.03	27.5
Thetis Island	453	39,916.4	45.92	37.3
Usk	1	6,626.0	4.77	36.6
Woodfibre–Darrell Bay	388	38,268.0	119.22	23.4
Refit route and spares-Courtenay Ferry District	24	10,873.7	0	0
Courtenay Ferry District-Office	N/A	20,857.5	N/A	N/A
Total	12 208	1,218,152.6	3,336.91	N/A

COMMUNICATIONS

During the year several mobile radio repeater stations were added to the system or moved to improve radio coverage. The Port Renfrew, Kootenay Pass and Revelstoke repeaters were moved and the Sooke, Mabel Lake and Clinton repeater stations were added. The Ministry of Transportation and Highways now operates nearly 4,000 mobile, 500 portable and 250 base radios. About 120 repeaters are used to provide a complete network centred at the various Regional Headquarters and to extend the range of each radio.

A satellite television receiver was installed at our Mount Lemoray camp to provide the CBC Northern television service.

The 180 new radios of Highways design were built by a contractor in Victoria. These radios will improve the overall reliability and quality of our trunked mobile radio repeater system.

A traveller's information system was built and tested at Allison Pass. This system can broadcast to the travelling public safety and general road conditions to be encountered ahead. The system has a range of about 1.5 km and uses a standard AM broadcast frequency of 1490 KHz. Permanent operation awaits the approval of the Canadian Radio-Television and Telecommunications Commission. Upon approval, two similar systems will be constructed at Chetwynd and the Mackenzie-Hart Highway interchange, principally to report prevailing road conditions in the Pine Pass area. Two systems of this type were nevertheless installed very quickly at Horseshoe Bay and Squamish to alert the travelling public of conditions on Highway 99 between these points.

A radio alarm system was installed at the Deeks Lake Dam above the Squamish Highway. Should the dam have given way Highways personnel stationed below would have had approximately five minutes to stop traffic in the endangered area. This system was removed in the spring of 1982 when the dam was secured by the Ministry of Environment.

REGIONAL REPORTS

REGION 1

(W. E. Mercer, P.Eng., Regional Director Highways, Burnaby)
North Vancouver, Gibsons, New Westminster
and Chilliwack Districts

NORTH VANCOUVER DISTRICT

Roads

Maintenance: Record setting rainfalls contributed to serious problems for the District, in washouts, slides and flood repair. Wide publicity was received with the very unfortunate event when "M" Creek Bridge washed out. Bridge crews from North Vancouver, New Westminster and Chilliwack all were mustered for the installation of a 95 m Bailey bridge at that location. Two days after the "M" Bridge washout, Highway 99 was again deluged with additional washouts at Porteau and Furry Creek. Flood damage was extensive throughout the District. The Seymour River threatened, as waters reached heights not experienced since the construction of the Seymour River Bridge in 1948.

A second Bailey bridge was added to Highway 99 at Culliton Creek to provide 2-way traffic. Also, a 52 m Bailey was installed to restore access to Callaghan Pit near Whistler. The original bridge was lost in the Boxing Day floods, 1980.

A massive debris slide engulfed Strachan Bridge No. 2 in early December. Fortunately, bridge damage was superficial and traffic was fully restored within 48 hours.

Several rock slides of a lesser nature were dealt with on the Horseshoe Bay to Squamish section of Highway 99. This increased frequency of rockslides has resulted in a much increased rock scaling activity by Geotechnical Branch.

A considerable effort was made to provide increased patrol and improved coverage along Highway 99 to Squamish. Two patrol units provided 24 hours a day, 7 days a week coverage through the winter months. To assist in public awareness, two "Radio 1490" limited range A.M. transmitters were installed near Horseshoe Bay and Squamish. Road conditions, closures, and delays were fed into these transmitters directly from Deas Tower every one to two hours.

A 24-hour watch was also provided on both sides of Deeks Creek Bridge for nearly two months while the Ministry of Environment undertook a dam stabilization project upstream at Deeks Lake. Highways Communication section installed a radio alarm system on the Deeks Lake Dam, so that a rapid closure of Highway 99 could be implemented if required.

A short section of the Trans-Canada Highway near Lynn Valley Interchange had severe wheel rutting and drainage problems which were very effectively handled through a grinding and repaving contract.

Also through contract, safety fencing on Lions Gate Bridge was extended.

An extended patching program was undertaken in the Pemberton area to obtain as much benefit as possible from a paving contractor set up in the area.

A sizeable inventory reduction took place in the Whistler area as the Municipality assumed responsibility for several roads.

The following snowfalls were recorded for the season: North Vancouver 204 cm, Bowen Island 183 cm, Squamish 401 cm, Whistler 703 cm, and Pemberton 572 cm.

Construction: Construction Branch administered a major rock work contract for rebuilding a section of Garibaldi Highway 99 through Cheakamus Canyon. This marks a tremendous improvement to that part of the District.

Improvements to the Whistler to Pemberton section of Highway 99 continued through the District day labour program.

Paving Branch supplied a much needed and appreciated 35 km of paving in the Whistler and Pemberton areas.

A median barrier installation project was carried out on Highway 1, Westview to Lloyd Avenue section. The guardrail replacement program continued on Highway 99, Horseshoe Bay to Britannia section, with a total replacement of 2 000 m for the year.

The District commenced construction of the "M" Creek Bridge approaches in preparation for the bridge contractor.

Bridges

Golden Dreams Bridge in Whistler was rebuilt by contract. A box beam structure on concrete abutments now replaces the original narrow log stringer bridge.

A contract was awarded for a new concrete structure crossing MacKay Creek in North Vancouver. This bridge will be part of the new "Low Level Route".

District crews rebuilt the entire log superstructure of the aging Mashiter Bridge in Squamish.

Buildings

Renovations have been undertaken to the District office to allow complete utilization of the upper floor with the appropriate phase out of basement usage. Minor modifications were made to the Pemberton's foreman's office.

Ferries

Normal operation continued between Darrell Bay and Woodfibre for the Motor Vessel *Garibaldi II*.

GIBSONS DISTRICT

Roads

Maintenance: The maintenance program was carried out as planned with minor revisions. The very wet year resulted in extra ditching and brush control being required. Winter maintenance was heavier than the past few years, but few problems were encountered. 2.2 km of road were improved or reconstructed on our Minor Betterment Program. Extra ditching and brushing programs were also undertaken.

Construction: 1.9 km of Malaspina Road were reconstructed to complete that project. The intersection of Sunshine Coast Highway and Madeira Park Road was improved to provide left and right turn lanes as well as improved alignment. 700 m of guardrail were installed in the Gibsons, Madeira Park and Powell River areas.

Bridges

Angus Bridge No. 7334 was replaced with concrete abutments and 18 m concrete box stringers. A 12.5 m Bailey bridge was installed to replace Chaster Bridge No. 7355 which collapsed. Normal maintenance was carried out on other bridges in the District.

Buildings

Maintenance was undertaken by B.C.B.C. in the usual manner. The District Office was relocated to new premises in September, 1981.

NEW WESTMINSTER DISTRICT

Roads

Maintenance: The District priority this year was to upgrade asphalt surfaces needing major repairs. Several maintenance betterment projects were created to carry out machine paving work and along with regular surface repair activities the District completed its goal. Some minor flood damage to the Lougheed Highway in the Whonnock area was experienced in the late fall with crews making immediate repairs. Winter maintenance activities were the heaviest in five years as the District snowfall was up this year.

Construction: Route 15 between 32nd Avenue and 40th Avenue was reconstructed by grinding the existing pavement and then grading the grindings and additional crush to form a new grade after which two lifts of pavement were added. On Canada Way at the intersection of Burris, new curb and gutter was laid to improve turning radii and create a bus pull-out. A half block of Chancellor Boulevard at Acadia was completed with curb and gutter.

Paving

The Barnett Highway around the Gulf Oil Refinery was recapped and shoulders paved. The shoulders were paved on Route 1 from Johnston Interchange to the Pike Interchange.

Bridges

Extensive damage was done to the protection piers on Oak Street and Middle Arm Bridges during the year with repairs carried out by the District bridge crew and outside forces. A regular maintenance program was carried out on all structures with major work on Canoe Pass Bridge piers and North Alouette Bridge caps and stringers being replaced. Under the Minor Betterment Program the bridge crew constructed stairs on the approach slope to the Pitt River Bridge and completed slope stabilization on the Campbell River, King George VI and Steveston Highway Overpasses on Route 99. Safety ladders and safety rails were installed on the Port Mann Bridge for the safety of crews.

Ferries

At the Albion Ferry landing, adjacent property was purchased so that the parking lot could be increased and the existing offices were relocated to the southwest corner of the new property. The new parking lot can hold up to 90 cars. During the year the *Klatawa* went into dry dock for a major refit and while in refit the *Klitsa* was put on the run.

At the Barnston Island Ferry a contract was called to repair the existing boathouse, replace walkway to boathouse with a new aluminum ramp and repair dolphins and shear boom. Property was purchased with clearing and preloading completed for the addition of an employee parking compound and a new terminal.

CHILLIWACK DISTRICT

Roads

Maintenance: On April 1, 1980, Hope District was absorbed by Chilliwack. Roads throughout the District were generally well maintained throughout the year. Dust was controlled on gravel roads by application of calcium chloride. Crews worked hard to keep up with mowing and brushing standards. The cleaning and maintenance of ditches continued to be emphasized throughout the District. Approximately 15.3 km of highway fences were renewed.

Construction: The reconstruction and improvement of Hemlock Valley Road continued, with culverts being increased in size, and the road widened in some areas of high fill. Crushed gravel was spread over 4.1 km of Chilliwack Lake Road. Drilling, blasting and widening of a 1.4 km section of Rockwell Drive was undertaken, with a multiplate culvert installed in Trout Creek and a grade revision. A 0.4 km section of Popkum Road was reconstructed with a minor grade revision, and widening of Edwards Road undertaken for about 0.4 km. Husband Road was cleared and constructed for 0.6 km and 0.6 km of Tremblay Island Road was regravelled.

Paving

The District recapped 2.5 km of Lougheed Highway 7 on Silverdale Flats, recapped 0.6 km and paved 2.1 km of Chilliwack Lake Road, recapped 0.4 km of Trans-Canada Highway at Jones Hill, all by District paving contracts. District crews recapped 0.5 km of Trans-Canada Highway east of Jones Hill, repaved 0.4 km of Popkum Road and repaved Johnson and Kerriluk Roads, Kawkawa Lake area, approximately 1.0 km. In addition, they repaved the approaches to Frost Creek Bridge and paved 2.4 km of shoulders on Fraser Highway.

Snow Removal

District crews were kept busy plowing, sanding and salting, throughout the winter, as snowfall was much higher than has been experienced for several years. Measured snowfall at Hemlock Valley was 1 198 cm (39.3 feet) and 727 cm (23.9 feet) at Allison Pass.

The Trans-Canada had two major closures due to avalanches in the Fraser Canyon, one for 26 hours and the other for 15 hours. The Hope–Princeton Highway had one major closure of 27 hours due to avalanches.

Bridges

Richardson Bridge, North Bend area, which was washed out in the December 1980 floods, was replaced early in the year. It is a 12.2 m log stringer bridge on log crib abutments. Thunderbird Bridge on Rockwell Drive was reconstructed, using treated timber stringers on new concrete abutments. Frost Creek Bridge on Columbia Valley Highway near Cultus Lake was completely reconstructed, using steel H piles, reinforced concrete abutments and 18.28 m prestressed concrete stringers. Suicide Creek Bridge was shortened by replacing a 3 m approach span with a fill. The main span, a Bailey bridge, was strengthened by adding chord reinforcing, and was redecked. The old sidewalk on the Sumas Drainage Canal Bridge was removed and replaced with treated timbers.

Minor repairs and routine maintenance was carried out on numerous other bridges.

Buildings

A new salt shed was constructed by District crews at Florence Pit in the Boston Bar area, increasing the salt storage capabilities five fold at this location.

Ferries

Recabling of the Boston Bar Aerial Ferry was completed, and maintenance checks were carried out at regular intervals. Property was obtained on the Boston Bar side to provide parking, and for proposed rest-room facilities.

REGIONAL REPORTS

REGION 2

(R. W. Gittens, P.Eng., Regional Director Highways, Kamloops)
Kamloops, Salmon Arm, Vernon, Penticton, Merritt,
Lillooet, 100 Mile House and Kelowna Districts

KAMLOOPS DISTRICT

Roads

Maintenance: Routine maintenance was carried out on all roads within the District and also within the rural section of the City of Kamloops. In general the spring and early summer of 1981 was fairly wet, but dry weather later on balanced most operations. Dust control was about normal but patching was extended to accommodate poor pavement surfaces in many areas. A total of 24 000 m^3 of gravel was spread over the travelled surface of various roads with another 14 000 m^3 of gravel used on shoulders.

The winter was normal except that constant intermittent nature of most storms caused extra use of sand and salt to maintain policy. Several snow slides were encountered in mid-February with warming temperatures, and pavement breakup was similar to previous years.

Construction: Final base preparation was done for 9.4 km on Clearwater Valley Road 1214 prior to paving by the drum mix crew and afterward the shoulders were gravelled. Final realignment was carried out on Agate Bay Road 525 for 3.4 km and Lac Le Jeune Road 2275 for 1.9 km. The Lac Le Jeune section was also paved with a road mix operation and other sections were machine patched due to poor surface conditions. The Hillside Connector project, approximately 0.3 km long, was completed in time for the opening of Aberdeen Mall. It involved finishing base construction and a paving and a curb and gutter contract. Some minor road widening was carried out on Deadman-Vidette Road 1427, Lemieux Creek Road 2881, Dixon Creek Road 1553 and Dunn Lake Road 1651. Various roads in the district were gravelled. A cattleguard was installed, 56.1 km of fence repaired and 1660 m of no-post guardrail installed.

Bridges

Routine maintenance was carried out on all bridges in the Kamloops District. One wooden bridge and one Bailey was replaced by concrete box beam structures (Fight Creek Bridge 1 and 2, respectively).

Ferries

New sheaves and main bridle were installed on the Little Fort Ferry, and a new ramp at McLure.

SALMON ARM DISTRICT

Roads

Maintenance: General maintenance was carried out on all roads within the district. Some areas encountered considerable breakup problems on the dirt and gravel roads early in spring, which led to the continuing gravel program that this district started the previous year. An extensive pavement overlay program was undertaken throughout the district due to pavement deterioration—the Trans-Canada receiving top priority. Once again we used old crankcase oil on our dust sites with good success.

Construction: Under the Day Labour program we continued regravelling throughout the district, with a total of 31.8 km completed. Extensive pavement overlay was contracted out for the Trans-Canada Highway 97.

The four-lane section of Trans-Canada Highway west of Salmon Arm was widened to accommodate left turn slots at Power Avenue and Picadilly Avenue.

Blade-mix asphalt was done in three foreman areas for a total of 2.8 km.

Fencing Schedule 2 Highways along Trans-Canada Highway and Highway 97 resulted in a total distance of 9.42 km.

The guardrail program east of Sicamous has been completed and the District is now working west of Sicamous replacing 460 mm guardrail with some 690 mm guardrail. Total of 1190 m of guardrail installed on last year's program.

The continuing Gradall Program completed 23.6 km of ditching.

Snow Removal

The 1981-82 winter was average to above average throughout the district. Snowfall started in December and continued into March. Total snowfall, by area, was: Salmon Arm 250 cm, Chase 196 cm, Falkland 251 cm, Celista 287 cm, Sicamous 237 cm, while Malakwa (in Sicamous Foreman Area) received 354 cm. Sanding and salting costs were very high due to continuing snowfalls.

Subdivisions

Subdivisions within the District created an additional 13.19 km of road, 3.0 km of which are paved. There were 227 new lots created and 351 permits were issued.

Bridges

Freeman Bridge was replaced with concrete beams early in the year with a change in alignment. Niskonlith Bridge wad replaced with a 3.4 m × 2.4 m arch pipe. There has been considerable delamination of the overlay on most of the bridges along the Trans-Canada. Bridge crew has been patching with U.P.M. patch mix with good success. General maintenance was carried out throughout the District—painting, redecking, etc.

VERNON DISTRICT

Roads

Maintenance: There was another wet spring in the Vernon district, with numerous minor flooding problems in suburban subdivision areas. Flooding on the Lumby-Mabel Lake Road closed the road to all traffic, save four-wheel drive units, for several days. There was a small slough slide too on the Enderby–Mabel Lake Road.

The excessive moisture resulted in more pavement breaks than normal in breakup time. The pavement repair was extensive, especially on Highway 6 east of Lumby.

The maintenance ditching program was intensified in all the road foreman areas during the summer months, to minimize future runoff drainage problems. With the above average snowfall accumulations of the 1981-82 winter, many slide-slough-runoff problems were anticipated.

The summer months were dry enough that an increase in application of dust layer was necessary. The increase in establishing of new lots by subdivision, are contributary to this annually.

This year 267 new lots were established. The regulatory function required processing of 394 permits.

Construction: Highway 97 improvement included the installation of 365 m of new guardrail and the extension of Schedule 2 fencing by 3.5 km.

Reconstruction projects were extended on the Lumby-Mabel Lake Road and the Grandview Bench and Westside Roads. Complete construction and paving were completed on the Baker-Hogg Road.

The four-lane section of Highway 97 north of Vernon, has been greatly improved with the completion of the landscape development project.

Buildings

Two new salt storage sheds were constructed to facilitate handling at Enderby and Vernon. These proved to be a valuable asset to the winter maintenance operation.

Paving

Local paving contracts put an asphalt surface on DeDecker Road and Rugg Road with recap on L & A Road, a portion of Silver Star Road, the B.X. Road and a portion of the East Vernon Road.

The final lift of asphalt paving was applied on Highway 6 for 25 km west of the Vernon District boundary, in the Monashee Pass.

Bridges

The Genier Bridge on the Whitevale Road was replaced with an 18.2 m prestressed box girder structure.

The Old Enderby Bridge was closed off and bypassed with a temporary 198 m detour bridge, a combination of pile trestle and Bailey bridging.

Deck repair and maintenance was completed on thirteen additional District bridges.

The contract was completed too on the Kettle River Crossing on Highway 6 in the Monashee Pass.

PENTICTON DISTRICT

Roads

Maintenance: In the Penticton area maintenance was extensive comprising ditching, culvert maintenance, shoulder regravelling, hand brushing side roads, machine and hand patching. There were some unusual drainage problems requiring easements and new culverts. Extensive swath mowing was done throughout the whole area and shoulder restoration on Highway 97 north of Penticton. There was more than average snow ploughing during the winter which doubled the use of salt plus major sweeping during the spring cleanup. Installation of 27″ guardrail and some rock scaling done on Highway 3A and Highway 97. Minor sand sealing was also accomplished.

As a result of a sudden spring runoff on the Apex Road, large boulders plugged one of the culverts and as a consequence washed out a major fill and other sections within a thousand foot section. This turned out to be a $100,000 minor betterment which involved the repaving of the washed out sections.

A machine paving contract was called to recap up to 1,000 foot sections both north and south of Penticton.

Short (150 m) sections of reconstruction were done to Eighth Avenue in Okanagan Falls and Lyons Road in Naramata.

Road surface maintenance was routine in the Oliver area with some major paving of side roads. The 2.2 km of cold mix was mixed in place on top of a deteriorated section of the Camp McKinney Road, and this material was then hauled to the short sections of gravelled roads leaving the 2.2 km section improved. Shouldering of Highway 97 was extensive between Vaseux Lake and Okanagan Falls.

Double the amount of salt and sand was used which was due to a prolonged winter.

Vaseux Lake hazard was improved and approximately 1 000 m of guardrail was installed. Major hand patching and crack sealing was accomplished. Some seal coating was also done and the minor betterment on the Camp McKinney Road with 4.5 km of blade mixing done in place.

A fairly severe rock slide occurred on the Richter Pass approximately 3 km west of Osoyoos during the Christmas season but was quickly taken care of.

There was heavy machine patching required on Highway 3 and the so-called Keremeos Bypass. The streets of Hedley were recapped with mix in place material plus extensive sealcoating in the Cawston and Keremeos areas. The Ashnola Road was regravelled. Ditching and culvert cleanup plus machine brushing was done on the Chopaka Road. Shouldering and guardrail on Richter Pass and Hedley to Keremeos sections was also accomplished. Minor drilling and blasting on the Nickle Plate Road, in order to accommodate an ore truck haul, was a major improvement.

There was 304 m^2 of steel binwall installed south of Lytton to accommodate the construction of a left-turn slot into the King subdivision. On the Trans-Canada Highway, 722 pieces of concrete guardrail was installed.

With the use of locally called contracts, 13 000 m of fencing was constructed on the District's Schedule 2 Highways.

In the Princeton area, there was a heavy patching program, both machine and hand patch, especially on Road 40 (Princeton to Summerland) and the Copper Mountain Road plus the main highways. Extensive right of way clearing, approximately 14.5 km on Highway 5 and Highway 3, west, which was done with the brush cutter attachment on the Gradall. Culvert maintenance and garbage pickup had increased.

An occurrence of snow slide on the Summers Creek Road closed it for one day with no major problems.

The salting and sanding was increased from previous years.

New construction and paving was done from the junction of Highway 5 to the new School (0.5 km). The old Airport Road was repaved for 1.3 km from the junction of Highway 5. Reconstruction and new construction was done on the Princeton to Summerland Road 40 between 34.6 km to 35.2 km and 40.3 km and 42.0 km, respectively.

Bridges

The Beaks Bridge on Lauder Road was reconstructed using timber piles, log stringers and a timber deck. Bridge repairs were carried out on Kingsvale No. 2, Gavelin and Marshall Bridges. One maintenance project of interest was the reconstruction of the east approach span of the Lytton Bridge. In order to minimize inconvenience to the public the replacement span was constructed off the site. Then, with the use of a large crane and flat-deck truck, the old span was lifted out of position and replaced with prefabricated span. The structure was closed to traffic for only 10 hours. Maintenance and repairs were carried out on a number of other structures.

Maintenance for the bridge crew comprised of bridge cleaning, minor redecking, sand blasting, painting, steam channelling, inspection, deck oiling, and deck surface repair to Stirling Creek Bridge. There was also cattle guard repair plus miscellaneous carpentry.

There were two bridge eliminations on Road 40 costing approximately $10,000 each.

The Red Bridge (old railway bridge across the Similkameen River) was restored both for historical and practical purposes. It was lined with 4′ × 8′ sheets of aspenite on the inside and downstream side. The upstream side was restored with the remaining original siding and painted the rustic colour. Cost was $50,000.

The McAlpine Bridge (6.4 km north of Oliver) was completely rebuilt which entailed the driving of new piles. It was widened by one span in order to accommodate the flow of debris in the spring. It was also possible to have it shortened with a sidewalk constructed on the upstream side and redecked and repaved. The total cost was approximately $85,000.

In order to accommodate the traffic a detour was put into effect from September 15 to December 4, 1981.

MERRIT DISTRICT

Roads

Maintenance: The gravelling and regravelling activities were heavily emphasized on the side roads in the Merritt District. Several roads such as Douglas Lake Road, Petit Creek Road, Lindley Creek Road and Botanie Creek Road were all gravelled or regravelled. The ditching and culvert maintenance activities received special attention in the Merritt area. Some major machine patching was carried out on Highway 8 and Highland Valley Road. Also an extensive road bed repair and patching program was undertaken on Highway 5 in the area of Stump Lake. A sloughing section of the Coalmont Road, caused by the deterioration of an old timber crib, was stabilized by the installation of 250 m^2 of steel bin wall.

The winter was more severe than had been experienced for the last several years, and as a result the planned accomplishments were exceeded in a number of activities in the foreman areas.

Construction: The major day labour project in the District was the continuing reconstruction of Meadow Creek Road. Although hampered by wet weather and poor soil conditions approximately 3 km were reconstructed and paved. The reconstruction and paving of the S-X curves on Highway 5 was completed. Portions of several side roads were reconstructed, Botanie Valley Road, Coalmont Road, Lindley Creek Road and Lauder Road. Shoulder widening construction was continued on Highway 5.

Bridges

The year's highlight was the long awaited opening of the Bridge of 23 Camels. The Honourable Minister, Alex Fraser, and the Honourable Tom Waterland, Minister of Forests and the Yale-Lillooet M.L.A. opened the bridge on June 26, 1981. Opening in conjunction with the new bridge were the new road approaches to the bridge, including Station Hill Road.

With the new bridge opened, the District bridge crew was finally able to stop repair on the old suspension bridge. Until the new bridge was opened, the bridge crew continuously repaired the old suspension bridge to keep traffic moving.

Also completed this year were the Pavilion and Glen Fraser Overheads on the Lillooet–Cache Creek Highway. With these bridges completed the Lillooet–Cache Creek Highway is now fully completed making for good travel time.

The bridge crew completed its biggest undertaking yet. The crew placed the box beams and deck on the new Yalakom Bridge and the bridge was opened to traffic. Foundation work was also started on the new Baker Bridge on the Loon Lake Road.

Ferries

Normal service was maintained throughout the year, except for high water in June, when the ferry was restricted to passenger traffic only for some maintenance and repairs. There were also problems during the winter months because of low water. The water level dropped below the ends of the ramps and the District was required to haul course fill, and end dump it over the ends of the ramps, to allow us to move the docking ramps down to keep the ferry in service.

LILLOOET DISTRICT

Roads

Maintenance: Spring break-up on the main highways, notably the Trans-Canada Highway, Cariboo Highway and the Highland Valley Road was again severe and necessitated special attention. Road base repairs, strengthening, followed by heavy machine paving was necessary to maintain paved surfaces. Extensive ditching and culverting programs followed on all highways, as a preventative measure against further spring break-up repairs.

Sealcoating was done in the Goldbridge area and on 35 km of the Lillooet–Cache Creek Highway.

Heavy rains in May caused many washouts in the Lillooet and Goldbridge foreman areas. One bridge was washed out and many road sections were closed. Repairs took about two weeks to complete.

A fairly wet summer kept dust control requirements down, but required regular gradings to maintain gravel road surfaces. Gravelling was carried out on the two main industrial roads; Duffey Lake Road and the Lillooet–Goldbridge Road, as well as many other District roads. Patching crews were very active all summer filling potholes.

Construction: Clearing and grubbing work began on Highland Valley Road to straighten bad corners and add additional third laning. Another section was begun on the Gun Lake Road system. Extensive paving work was nicely completed in the North Lillooet Subdivision area. Seven km of grade work was mostly completed on the Duffey Lake Road. Road approaches to Pavilion Overhead Bridge were completed and paved.

Snow Removal

Throughout the winter heavy snows and freezing rain kept winter crews active all winter. Ploughing, sanding, and salting requirements were heavy throughout the winter.

High snowfall brought many avalanches down on the Duffey Lake Road and the Lillooet–Goldbridge Road.

Several preventative closures were necessary on the Lillooet–Goldbridge and Duffey Lake Roads due to high avalanche hazards and avalanches on the road. Experience gained from these road closures will be highly useful in formulating future road closure policy.

Gathering data from the snowfalls should prove useful for the avalanche program on the Duffey Lake and Lillooet–Goldbridge Roads.

100 MILE HOUSE DISTRICT

Roads

Maintenance: District maintenance programs went according to plan with emphasis being placed on road base strengthening and regravelling. The District continued it's extensive ditching program with 37 000 lineal metres being accomplished. It also undertook a dust control program in which a comparative study evaluating the differences between calcium chloride and lignosulphonate was done. Patching requirements remain to be a high priority, as the paved road surfaces continues to deteriorate on the Cariboo Highway 97.

Normal winter maintenance activities were carried out with the return of average winter temperatures and snowfall, after having experienced two years of very mild temperatures and little snowfall. Chemical useage was above normal due to constant freeze-thaw cycles. The District again covered the winter with two shifts.

Last year a significant increase in the regulatory functions was recorded as access permits rose 69 per cent from 1981 and subdivisions 66 per cent.

Construction: Numerous projects were undertaken by the District crews with major and minor improvements accomplished. About 4.5 km of the Clinton–Pavilion Road was constructed with an additional 11.5 km being upgraded in preparation for paving which was completed in September by the Regional drum mix crew. On Highway 24, 4 km of new right of way was cleared, grubbed and fenced and also 15.2 km of rebuilt section was stabilized with calcium chloride. Sections of the Canim–Hendrix Lake Road were realigned, widened and gravelled. Slope stabilization was attempted on the Eagle Creek cut section by placing mesh over sections of the slope. At the Tatton Road-Highway 97 intersection, a 4-m cut bank was removed to improve the site distance and also construct a deceleration lane. Tatton Road level railway crossing was also improved with the removal of a 3-m bank in order to facilitate a school bus run.

Bridges

General maintenance was carried out as scheduled, which consisted of routine washing, painting and redecking as required.

The Bullock Bridge, a pile-trestle structure, was completely rebuilt by the District bridge crew and Churn Creek and Mound Road Bridges were fitted with new brow logs and needle beams.

Ferries

The Big Bar reaction ferry continued routine operation throughout the summer months. During the freeze-up period, the aerial ferry is put into regular operation.

KELOWNA DISTRICT

Roads

Maintenance: Spring break-up was moderate, but, extensive pavement patching was required on sections of Highway 97, Highway 33 and several collector and minor roads. In an effort to reduce the ever increasing public demand for dust control, 24.97 km were sealcoated using 16 mm crushed aggregate and HF 150 oil. All other gravel roads were treated with a M. & F. solution. Other maintenance was carried out generally in conformance with scheduled activities, with emphasis given to shoulder and ditching activities. Because of the more than average rainfall during the summer, flood damage repair at several times had to be given priority.

More than average snowfall, particularly at higher elevations, kept the winter shift crews busy without a break from mid-December to the end of February.

Construction: Day labour construction was largely directed to District collector roads with the exception of 3.2 km of repaving of Route 97 between Winfield and Oyama. The following results were achieved: Reconstruction and reshape—33.78 km, new construction—1.80 km, paving —16.71 km, sealcoating—24.97 km.

Bridges

The old fence of the Mission Creek Bridge was replaced with a tubular fencing and sidewalk added at a cost of $65,000. This work was necessary to provide better visibility. General maintenance was carried out on all other bridges.

Buildings

The bridge crew and the electrical crew were able to move to their new quarters. This building is located in the Kelowna maintenance yard and was formerly occupied by the Ministry of Agriculture and Food. The Paret Pit received a major clean-up re-arranging and landscaping. This pit is used for the District's material storage of culverts, guardrail, etc.

The bridge crew constructed long-needed concrete bases for two old railway tanks used for M. & F. dust repellent solution.

REGIONAL REPORTS

REGION 3

(W. M. Sproul, P.Eng., Regional Director Highways, Nelson)
Nelson, Rossland, Grand Forks, New Denver, Cranbrook,
Fernie, Golden, Revelstoke and Creston Districts

NELSON DISTRICT

Roads

Maintenance: Regular spring and summer maintenance was carried out as usual throughout the District. Several side roads were upgraded and improved. About 1.9 km were widened and gravelled and 0.8 km of previously dedicated road was opened to traffic. Spring run-off was normal and caused few problems but winter was another matter. The snow began early and continued almost uninterrupted until after March. The District forces operated a three-shift system. Costs were up considerably from previous years.

Construction: One major project was continued on Highway 3A east of Nelson with 0.7 km being 80% completed. Highway 6 was reconstructed near Passmore because of a fill failure. Intersection improvements were made at several locations on Highway 6, west of Nelson.

Roadside Development

Gravel Pit Reclamation: Twenty gravel pits were worked on in 1981. Unsafe faces and mined out portions of active pits were recut and dressed. Depleted pits were recontoured, hydroseeded and planted with native tree seedlings.

Rest Area and Roadside Development: Two new rest areas were established. The facility in the Yoho Canyon replaced a small, overused installation.

Near Spillimacheen a wide section of right of way was developed for use. A number of existing sites was upgraded with development of water systems, addition of tables, toilets and bear-proof containers. Two other sites were serviced with electricity and paved.

Survey work to design left turn slots has commenced at six sites.

Vegetation Control: 72 ha of weed-infested right of way were chemically treated. Three ha were hand cut experimentally and 851 shoulder km were treated with soil sterilent.

Hydroseeding: 430 ha of right of way were hydroseeded (37 of these were hydromulched) and 227 ha were refertilized. In addition 95 ha were seeded by helicopter. The Test Plot Program was continued with three new establishments.

Gravel Crushing: 160 224 t of 16 mm gravel, 168 417 t of 19 mm gravel, and 42 785 t of 76 mm gravel were crushed in Region 3 in 1981. Some production time was lost when a primary crusher was not always available.

Mixing Plant: 8 514 m^3 of patch mix was mixed in Region 3 in 1981. Production was hampered by wet weather, machinery breakdown and late asphalt deliveries.

Bridges

The Slocan Valley came in for particular attention during the year with the collapse of the Perry's Bridge. Bailey bridges were constructed or improved across the Slocan River at Perry's, Vallican and Slocan Parks. A new bridge was commenced at Airy Creek, also in the Slocan Valley.

Ferries

The Kootenay Lake ferry service continues to gain in popularity. Summer traffic is particularly heavy, and both vessels are hard put to keep up with the traffic. Extra sailings were necessary, during the winter, due to closure of the Salmo-Creston Highway. New propulsion units were installed in the M.V. *Balfour*. Glade and Harrop ferries operated as usual without serious interruption.

ROSSLAND DISTRICT

Roads

Maintenance: Besides the regular scheduled activities, a wet spring kept the crews busy maintaining drainage courses and repairing minor washouts. The summer months again tested the foremen's ability to reschedule their maintenance work to accommodate demands from day labour projects and Regional crews.

During the fall months things settled into a regular routine. However, a "back to normal winter", according to the "old timers", after four easy years pushed costs well above allotments for winter activities.

Road bed repairs and drainage improvements accounted for a large portion of minor betterment costs. Also a runaway lane was all but completed at the east junction of Highways 3 and 3B and this should be well appreciated if any trucks lose their brakes.

Construction: The intersections at Meadowbrook in Castlegar and Columbia Road in Ootischenia both on Highway 3 were reconstructed to provide efficient and safer access with the provision of turn slots and acceleration and deceleration lanes.

Approximately 5.4 km of minor roads were paved or recapped and 1 730 m of guardrail was installed mainly along the Blueberry-Paulson section of Highway 3.

No-post guardrail production at the Castlegar yard was altered somewhat by additional forms and the use of a concrete additive. The additives gives high early strength which in turn eliminated the need for steam curing, saving time and costs. A total of 3,930 pieces or 9 590 m of guardrail was produced plus 66 lamp standard bases, 55 electric boxes and other sundry items.

Residents of Lower Warfield and Trail, as well as maintenance crews, will feel relief now that the capacity of the Wellington Street culvert containing Trail Creek has been increased by installing approximately 100 m of 1 500 m C.S.P. alongside the existing box culvert.

Bridges

Both Beaver Creek No. 1 and the Waneta Bridge were redecked. The "super snooper", which can gain easy access to the underside of high bridges, was instrumental in the discovery that the bearings at the north finger joint on the Brilliant Bridge were out of alignment. It was used to effect quick repair.

Ferries

By working long hours, the District forces capitalized on low water conditions in the Columbia River below the Hugh Keenlyside Dam to replace the old wooden ferry approaches on the Robson side with shot rock fill. Greatly reduced maintenance costs are anticipated. Despite the existence of the two alternate routes between Robson and Castlegar, the Castlegar ferry remains one of the major carriers in the Ministry's fleet of ferries.

GRAND FORKS DISTRICT

Roads

Maintenance: A number of roads in the District were constructed and upgraded under the minor betterment program. Patching of asphalt roads continued throughout the District, with the majority of the work carried out on Rock Creek–Kelowna Highway 33. Extensive ditching and shoulder upgrading was carried out on Highway 3. Deer reflectors were installed at eight locations, and indications are that fewer deer have been killed since the reflectors have been in place. Routine summer maintenance was carried out, with numerous culverts installed to facilitate drainage. Above normal snowfall required the use of more salt and sand than in recent years. A number of snowslides occurred in the Paulson area.

Construction: The reconstruction of Highway 33 between Rock Creek and Westbridge was completed and paved by Headquarters crews. A number of minor roads were constructed or upgraded. The guardrail and fencing programs were continued as in previous years.

Bridges

Routine maintenance was carried out as required on all bridges. The approach spans on Granby Bridge were renewed and the wood approach spans on Hummingbird Bridge were replaced by Steel I Beams. Harpur Bridge was reconstructed with creosoted material.

NEW DENVER DISTRICT

Roads

Maintenance: Work in the District was routine except for patching, which was extensive on Highway 6, New Denver South, prior to repaving in June. Snowfall during the winter was very high with frequent snowfalls. The 2 900 m of 69 cm guardrail was installed.

Construction: In Edgewood a two km section was constructed and gravelled. Bridge approaches to the new bridge over the Inonoaklin Creek on Highway 6 were built and paved and .6 km of Highway 6 was relocated, for better alignment to the new bridge. The shoulder was widened on Highway 6, Nakusp–New Denver, 2.3 km.

Bridges

Pre-emption Bridge No. 851 was replaced with a 24.4 m prestressed concrete box stringer structure. Rapid Creek Bridge No. 6431 was also replaced with 18.3 m of prestressed concrete box stringer structure. Piles were driven for future construction for Cold Hill Bridge No. 6428 and Meadow Creek Bridge No. 6427.

Buildings

A salt shed was built in the Meadow Creek Pit.

CRANBROOK DISTRICT

Roads

Maintenance: Maintenance management activities were all completed in the District with some manhours transferred to other activities of a higher priority. All district roads were well maintained during the year.

Although the snowfall at the lower levels during the winter months was not excessive in the Cranbrook District, frequent snowfalls and numerous freeze-thaw cycles occurred.

A three shift system was incorporated in Cranbrook and two shift system in Kimberley and Yahk so that coverage was provided seven days per week.

Road base repair, patching, ditching, grading, culvert maintenance and sign maintenance were the main summer activities undertaken.

Dust abatement in the form of calcium lignosulfonate and calcium chloride was applied to 110 pass km of gravel and dirt roads in the District.

Construction: The Capital Day Labour program included the reconstruction, realignment, grade revision and gravelling on the following District roads, St. Mary's Lake Road 18—1.5 km, Pighin Road 72—1.9 km, Mission Road 8 and Mission–Wasa Low Road 16—3.7 km.

An extensive program of double flushcoat and reflush treatment was also undertaken on various streets and roads in the Cranbrook District. The double flushcoat amounted to 11.5 km and the reflush was 27.7 km. The major streets in Moyie townsite were included in the double flushcoat program.

The minor betterment work involved 0.8 km of reconstruction and gravelling, and an additional 10.2 km of roads and streets were reshaped with the addition of crushed granular, in preparation for the flushcoat program. Road mix paving amounted to 0.8 km.

The access to Cherry Creek rest area on Kimberley Highway 95A was reconstructed and gravelled while the main road through Kootenay River rest area on Kootenay–Columbia Highway 93 and 95 near Wasa, was reconstructed, gravelled and double flushcoated.

Other work undertaken involved the replacement of 127 m of 46 cm guardrail with 69 cm guardrail; installation of 11 wheelchair drop curbs at the intersection of Cranbrook Streets with the arterial highway, placement of approximately 300 deer reflectors adjacent to Kimberley Highway 95A and Kootenay–Columbia Highway 93 and 95. Under the Schedule II Fencing Program, there were four fencing contracts awarded covering 3.25 km fencing.

Bridges

Lewis Creek Bridge No. 6354 at Wasa was completed and opened to traffic, an asphalt surface was placed on the bridge deck. The 18.2 m concrete box stringer replaced a 10.4 m log stringer bridge, constructed in 1957, on Lazy Lake Road 32.

The curb on the north side of Curzon Overhead No. 1740, located on Southern Trans-Provincial Highway 3, was replaced. Repairs to the structure became necessary, due to concrete deterioration and spalling.

Buildings and Yardsites

The Kimberley maintenance depot was completely repainted inside and outside by B.C.B.C. with minor alterations also undertaken to the furnace room which provided for additional working room.

The McPhee Bridge was officially opened on September 26, 1981. Work commenced on the McPhee Bridge May 1979, to fabricate and erect steel for a four-span structure across the St. Mary's River on a relocated section of Highway 95A.

The new bridge is a steel box girder design, 274.5 m long, with a two-lane, 8.54 m roadway. Two spans are 61 m long and two are 76.25 m long.

The old McPhee Bridge was built around 1910 and the road was gazetted in 1926. The relocation of Highway 95A provided a Cranbrook Airport access road and reconstruction and paving of 14.8 km of Kimberley Highway 95A.

FERNIE DISTRICT

Roads

Maintenance: A wet spring in 1981 resulted in major drainage problems west of Fernie. A major washout occurred 26 km west, resulting in a 13 km detour between Morrissey and Elko for four days. The heavy rains also caused many sections of the highway west of Fernie to settle and this necessitated building up lanes and patching the surface. Repairs to damaged fences was once again needed after wildlife knocked them down. A normal winter kept crews busy maintaining roads in good winter condition.

Construction: Various District roads were constructed under Capital Minor Betterment Projects. This included Martha Road 0.48 km, Waldo Road 2.90 km, Fernie Hosmer Road 0.78 km, Dock Road 0.21 km, and Rock Creek Road 2.06 km. Revisions to the Carbon Creek Bridge approaches were undertaken with a hotmix pavement placed on 0.20 km. Continuing construction of 3.90 km of Corbin Road continued, with traffic able to use the new route. Another lift of liquid calcium was applied to 19.14 km of Corbin Road. Elk Valley Highway 4 shoulder widening continued, with completion of 5.80 km of shoulder widening and ditching completed. This includes some work on the 3.80 km widened the previous year. Sealcoating was undertaken on 9.68 km of district roads. Road mix paving was done on .66 km of district roads. Liquid calcium was placed on 2.06 km of Rock Creek Road and 5.00 km of Kikomun Newgate Road. Approaches to the new acrow bridge across Wilson Creek were constructed and paved with coldmix 0.06 km. Metal guardrail on both sides of the Elk River Bridge was replaced with 690 m of concrete barrier. With the paving by contract of Highway 93, no problems arose this year.

Bridges

Continuous maintenance of the Wilson Creek Howe truss bridge became a losing battle and this necessitated the installation of a 33 m acrow bridge, while a new bridge, under construction by contract, was begun. A walkway under the Elk Underpass was completed, enabling pedestrians to cross the highway safely. Repairs to the Michel Prairie Bridge continue and a whole new deck replacement was started, with completion slated for the new year. A collapse of two small structures presented the opportunity to replace them with culverts. These were a six m structure classed as a culvert on Cullen Road, and the Wildman Bridge in Hosmer. Bridge Branch installed a sidewalk on the North Fernie Bridge, making a safer crossing of the Elk River possible. This work was undertaken by contract. Metallizing of bridge railings was completed on Alexander, Big Sand and Little Sand Bridges. Some panels of the Hosmer Bridge were also done. Installation will be completed in the new year. Removal of the deck on the Carbon Creek Bridge was undertaken and the stringers will be removed in the new year.

Buildings

Several problems arose with buildings in the District, and getting them resolved remains a problem with B.C.B.C. The asphalt storage tanks at Sparwood are now completed, while Jaffray still awaits tank raising and walkway installation. A new salt shed proposed for the Elk Sand Pit was started and should be completed in the new year.

Other

In the spring a heavy rainfall resulted in a swollen Elk River and this endangered a house 11 km west of Fernie. The placing of rip rap was undertaken by this Ministry (for the Ministry of Environment), to protect it. Rip rap was also placed along the shore of the Elk River at the Cunliffe Pit, to keep water within the channel after a small portion of the dyke was washed out, threatening the radio towers. The high water of the Elk River, 19 km west of Fernie, necessitated placement of a rip rap berm to keep the river from undermining the fill.

Landscaping of Whitecloud Pit was undertaken by District forces, so that that area could be hydroseeded and returned to owners.

GOLDEN DISTRICT

Roads

Maintenance: District roads were generally well maintained throughout the year. Emphasis was on gravelling, ditching, shouldering and patching. Machine patching by contract was carried out in the Invermere foreman area. Sealcoating was completed on 11.0 km of paved side roads. The dust control program was reduced due to generally wet weather and benefits from previous years' calcium chloride treatments. Maintenance betterments, in the form of shoulder widening on the Trans-Canada and minor road construction on Houlgrave were completed with maintenance funds from other activities.

Heavy rains resulted in three major mud slides in the Golden foreman area: Trans-Canada Highway (Yoho Canyon) east of Golden, July 30—four-hour closure, August 20—seven-hour closure (August slide resulted in one death) and Highway 95 south of Parson (Quinn Creek) September 19—10-hour closure.

Snow storms were more frequent this winter and thus more ploughing, sanding, and chemical treatment was required in comparison to the past few years.

Construction: Trans-Canada Highway east of Golden had 4.0 km of shoulder widened and Highways 93 and 95 had 18.0 km of shoulder constructed. Canal Flats Streets, Windermere Roads, Columbia Lake Road were paved, as well as several minor side roads (road mix 2.5 km; hotmix 4.9 km). Steamboat Mountain, Brisco, Golden, Donald Upper, Dorney, and Young Roads were major roads worked on in reconstruction of 8.6 km of District gravel roads.

Highways 93 and 95 had 7.1 km of refencing completed by contract for Schedule II Highways. Viewpoints on Radium Hill had deteriorated asphalt guardrail replaced with log rails. Toby Creek Road had various curved guardrail 1.1 km total.

Surveying of Section IV Roads for the purpose of gazetting was undertaken again this year by District Survey Crew and is proposed as an ongoing program.

Bridges

No new bridges were constructed. Repairs, cleaning and general maintenance was undertaken as required on District bridges. Load restrictions were placed on Musquash and Spillimacheen Bridges on Brisco area side roads. Musquash will be restored to legal loading by early April, 1982. Fence panels were removed from Blaeberry Bridge No. 1394 (65.5 m) on the Trans-Canada, cleaned, metalized and replaced. (This is the first bridge to have fence panels metalized in the Golden District).

Snow plow racks were constructed in the Invermere yard by the bridge crew. A hoist rack was constructed in the Golden yard for the purpose of removing truck boxes and sand bodies more safely from units. District bridge crew also assisted the Fernie bridge crew for several weeks.

Buildings

District office moved into new building in August.

REVELSTOKE DISTRICT

Roads

Maintenance: Regular maintenance was carried out in all roads in the District, with extensive ditching done on Trans-Canada Highway 1 and Nakusp–Mica Creek Highway 23 (north). Machine brushing was undertaken on Trans-Canada Highway 1 (east), Highway 23 north and south, and on Balfour–Kaslo–Galena Bay Highway 31. The 1 890 m of 460 mm guardrail was replaced with 690 mm guardrail on Trans-Canada Highway 1 west of Revelstoke and on Highway 23 north. M. & F. road stabilizer was applied to gravel roads throughout the District with good results. The spring runoff was relatively mild and no major problems occurred. An above average snowfall for the year resulted in increased avalanche activity throughout the District, with a number of road closures of short duration during December, January and early February on Trans-Canada Highway 1, Highway 23 north and Balfour–Kaslo–Galena Bay Highway 31. A record storm snowfall of 116 cm over the weekend of February 13 and 14 caused lengthy closures of up to four days on Trans-Canada Highway 1 and Highway 23 north. There were 38.01 km of roads taken over by the City of Revelstoke through the restructuring of their boundaries.

Construction: Reconstruction continued on Balfour–Kaslo–Galena Bay Highway 31 between Armstrong Lake and Trout Lake for a total of 3.10 km. Major improvements were made to 2.10 km of road in the Revelstoke foreman area.

Bridges

Bridge cleaning was completed on all bridges. Bridge railings from Woods Overhead No. 1432 and Clanwilliam Overhead No. 354 were painted in the heated maintenance shed during the winter. Piles were driven for new bridges to replace Armstrong Bridge No. 551 and Trout Lake Bridge No. 1048. The bearings were replaced on Columbia River Bridge No. 1532. All of the joints on the roofs on the three avalanche sheds east of Revelstoke were sealed with crack filler. Minor repairs were carried out on various other bridges throughout the District.

Buildings

Snow roofs purchased from the Mica Dam Project were erected at Trout Lake and 50 Mile Yards for equipment storage. A salt storage shed was also constructed at Trout Lake.

Ferries

M.V. *Galena* maintained a regular shedule throughout the year with the exception of a six-hour period on February 26 to replace bearings in the forward V.S.P. unit and another six-hour period on March 17 to exchange a V.S.P. with the spare to facilitate repair.

CRESTON DISTRICT

Roads

Maintenance: Early spring rains, while frost was still on the ground, and some frozen culverts, caused some minor flooding and surface damage.

Road restrictions on side roads helped keep frost damage to a minimum.

Most regular maintenance activities were completed within schedule, with minor betterment programs concentrating on side road upgrading.

Minor rest area improvements continued with landscape improvements at Lost Creek, Blazed Creek and Twin Bays.

The guardrail program continued with the installation of 1 198 m of 690 mm no-post guardrail on Highway 3A and 3.

A minor sand-seal operation was carried out with 20.0 km of side roads sealed by Regional crew.

Subdivision applications were 105 while permit applications increased substantially to 180.

Construction: Several projects were completed on District side roads with 4.81 km reconstruction, 27.43 km reshaped/gravelled, 23.36 km drum mixed by Regional crew, 7.0 km shoulder reconstruction on Highway 3 and 3A, 2.94 km of Schedule II fencing, .90 km of new roads opened and construction, and 15 wheelchair curb drops constructed on the Creston arterial highway.

Snow Removal

Winter maintenance activities were covered by two 10-hour shifts at Kootenay Pass and two 7.8-hour shifts in Creston/Crawford Bay areas.

Above normal precipitation occurred resulting in a 60 per cent increase in the use of salt and winter sand and considerably higher usage of maintenance equipment over other years.

Kootenay Pass snowfalls totalled 1 063 cm which was 94.3 per cent of the 20 years average.

There were 430 recorded avalanches of which 139 affected the highway and 103 completely blocked it. Forty one per cent were natural releases, and 59 per cent were controlled releases. There were 1,083 avalauncher rounds used and 72 hand charges.

Highway closures totalled 238 hours and 35 minutes with the longest closure 83 hours and 30 minutes.

Bridges

Inspections and general maintenance were carried out on 27 District bridges.

Construction was undertaken on two wooden structures which involved caps, end posts, stringer work and decking. Major work was the construction of a new bridge at Boulder Creek.

Buildings

Architectural design is in progress for a new camp complex at Kootenay Pass.

REGIONAL REPORTS

REGION 4

(L. A. Broddy, P.Eng., Regional Director Highways, Prince George)
Prince George, Quesnel, Dawson Creek, Fort St. John,
Vanderhoof, McBride and Williams Lake Districts

PRINCE GEORGE DISTRICT

Roads

Maintenance: The light snow from the previous winter melted early in the spring of 1981. However, the freeze-thaw period in January and February caused many frozen culverts and drainage systems. This kept maintenance crews busy clearing and thawing to avoid flooding in local residential areas.

No major frost heaving or spring damage occurred to trunk highways or local roads, except for a few short sections on Highway 16 East necessitating repair.

The John Hart Highway north of Summit Lake (to be constructed) again required major patching.

During the summer, dry weather assisted in our minor betterment and regular improvements and maintenance program throughout the District.

The heavy snowfall this past winter required a major concerted effort by our maintenance crews. Private graders and cats were also required to widen and assist in our snow clearing activities.

Due to the constant snowfall, causing compacted road surfaces, extensive sanding and salting operations were required to maintain the safest possible driving conditions.

Construction: Major improvements were made on 25.1 km of miscellaneous school bus routes and feeder routes within the District.

There were 12.6 km reconstructed on the Upper Fraser Road plus major preparatory work on the last 5 km to Upper Fraser Townsite.

Clearing and road base works were made on 3 km off the Norman Lake Road.

Widening and gravelling was completed on 1.9 km off the Longworth access road.

Clearing was completed on the 2 km of new Tabor Lake East Road.

Sand blankets, culvert installation and gravelling was carried out on 1 km of swamp area on this route.

Six km of fencing was completed on Schedule II highways and 2.2 km of 69 cm guardrail was placed on truck highways within the District.

Bridges

Two new bridges, one 9.75 m and one 12.19 m in length, were constructed on the Upper Fraser Road to replace old existing structures.

A 9.75 m pile trestle, log stringer bridge was constructed on the West Lake Road. This bridge is constructed on a new section of road which now skirts the newly developed Provincial Park.

The Old Fraser Bridge required extensive welding to the deck again.

The Old Nechako River Bridge received a new plank deck and the portal braces were repaired.

Approach fills were completed on the Dome Creek Bridge No. 2 and additional piling was driven on the long span of Dome Creek Bridge No. 3 to bring it up to proper load capacity.

Buildings

No new buildings were received nor major modifications made to our existing structure.

Ferries

The Isle Pierre Ferry was out of service until July 27, 1981. It remained in operation until December 2, 1981 when low water ice conditions necessitated its removal for the winter.

QUESNEL DISTRICT

Roads

Maintenance: Winter damage was not extensive, however, deteriorating pavement in some areas contributed to higher than normal maintenance requirements for some activities.

Spring runoff provided no major problems this year.

Dust control was undertaken with calcium chloride over some 240 km.

Construction: Second lift paving by contract was completed on Two Mile Flat of the Cariboo Highway and the Mitchell Bridge elimination on the Barkerville Highway.

Several kilometres of shoulder widening was completed on Barkerville Highway 26.

Shoulder widening, guardrail and street lighting installation was completed on Cariboo Highway 97 at Dragon Lake Hill.

Some 90 km of other District roads were included in the construction and upgrading program throughout the District.

Ferries

The reaction ferry at Marguerite was operated from late March to early December. The aerial cage ferry was used during the winter months.

Bridges

The Meadowbank Bridge was replaced with a precast concrete structure.

Extensive repairs to the ballast walls, deck, and stringers were completed on the Cinema Bridge.

Maintenance repairs were undertaken on several other bridges in the area.

DAWSON CREEK DISTRICT

Roads

Maintenance: A very mild, dry winter ended April 6, 1981 with numerous freeze and melt cycles and numerous wet snowfalls, resulting in a total accumulation during April greater or equal to the period 1980-81 prior to April. These weather conditions caused damage to all earth and gravel roads due to loss of gravel, and flooding caused by frozen culverts. All available culvert steaming equipment in this District was utilized during April.

A dry summer followed, allowing crews to repair roads, accomplish ditching projects and replace some of the lost gravel. Dust control was a problem, however.

The winter of 1981–82 was slightly more severe for the Peace River area, however, good winter maintenance standards were maintained. Sand stockpiles were almost depleted in most areas and additional sand was prepared in the Pine Pass during March.

Construction: The miscellaneous day labour District road improvements consists mainly of gravelling, and regravelling—14.7 km new gravel and 127 km of regravelling. Also, there was 6.3 km of construction or reconstruction and gravelling.

Major construction continued on access to the Northeast Coal with shoulder widening and placing of sub-base gravel (45.7 cm) in preparation for paving on 69 km of the Boundary Road section of the Heritage Highway.

Also, construction and gravelling was completed on 10 km of Grizzly Valley section as well as reconstruction commenced in preparation for paving on the portion of the Heritage Highway from Tumbler Ridge to Quintette Coal Mine turn-off.

Other projects undertaken were major patching of Highway No. 97 in the Pine Pass and shoulder widening of approaches to the Taylor Bridge.

Extraordinary maintenance projects including dust control were completed on Northeast Coal access, 100 km of the Flatbed section of the Heritage Highway, and 105 km from Chetwynd to Tumbler Ridge.

Bridges

One District bridge, Q7133, 56 m long, was constructed replacing the old one Island Lake Crossing, and Bridge Q7132 was reconstructed. Also 39 other District bridges received varying amounts of maintenance. All bridges were inspected.

The District Bridge Crew also constructed substructure for the Northeast Coal access, temporary bridges, Bullmoose, Flatbed, Wolverine and Murray River bridges. In addition, this crew constructed a 12 m long log temporary bridge on the Bullmoose to Tumbler Ridge East project.

Ferries

The Clayhurst Ferry performed well, commencing service March 16, 1981, to December 24, 1981, with only a four-hour shut-down due to mechanical problems. Cold weather and heavy ice floes interrupted service in late December and the ferry was removed from the river January 6, 1982. Service resumed again March 29, 1982.

FORT ST. JOHN DISTRICT

Roads

Maintenance: The late, cold spring delayed the drying up of the roads and caused extensive road base deterioration. However, once summer arrived it was dry and hot, causing a demand for dust control and posing difficulty in grading the gravel roads. The winter was long and cold with heavy snowfall, resulting in a very active winter road maintenance program. Activity in the forest and petroleum industries decreased, thereby lessening the demands on roads.

Construction: Construction activity was very busy, commencing on June 3 and carrying on intermittently up to March 31. The dry, hot summer proved ideal for construction work. The program included 71 km of road regravelled, 40 km of road upgraded to an improved gravel standard, and 39 km of road upgraded to a standard ready to prepare for paving. There were 17 km of road completely base gravelled to prepare for paving, and 27 km of road were base gravelled in part to prepare for paving. The fill section of the Highway 29 Deep Creek realignment to straighten the highway and eliminate the Bailey bridge crossing was completed to subgrade elevation. Sheet piling was utilized to allow the fill to be constructed over unstable foundation soils.

The intersection of Highway 97 and 100th Avenue in Fort St. John was reconstructed to improve traffic flow. The upgraded intersection is now ready for signalization.

Bridges

One bridge was replaced by a precast box stringer structure. The B.C.R. Fort Nelson River Bridge, used jointly by the Ministry and B.C.R. received a complete new wood decking and wheelguards by the District bridge crew. With the lesser amount of heavy industrial traffic, the damage to bridges was significantly reduced.

Buildings

The District bridge crew moved into alternative facilities in March thus able to carry out their activities in less cramped quarters and simultaneously provide more space for the previously cramped Fort St. John road crews. The extra space is being well utilized and is appreciated by the staff.

Ferries

The hoverlift ferry at the Fort Nelson River crossing of the Liard Highway went through its third season of operation. Modifications and improvements were attempted and continued. The ferry system was heavily used throughout the season to facilitate the public, the forest industry, the petroleum industry, the construction of the Petitot River Bridge near the North West Territories border, and the continued construction of the Liard Highway north of the Fort Nelson River.

VANDERHOOF DISTRICT

Roads

Maintenance: Break up and spring runoff was near normal with the exception of one subdivision near Vanderhoof, which required special attention.

Ditch cleaning, regravelling, culvert replacement, hand patching and dust control all received extra attention during the summer.

As in past years, flake calcium was the major dust palliative used in this district, however, calcium lignosulfonate was experimented with on a section of Stella Road to determine its effectiveness on various surface conditions.

Different types of brush cutting machines were used to determine the most efficient for this district's terrain.

Record snowfalls created problems during the months of January and February with several storms coming in close succession, making it difficult to clean up from the one before the next one hit. On some occasions, ploughing on the main highways had to be resumed before all the side roads were completed, and on a few occasions the ploughing of driveways issued with ploughboards, had to be suspended temporarily.

Two shifts, seven days a week, were utilized for winter maintenance.

Construction: Vanderhoof District employed two construction foremen and the remainder of employees were auxiliaries.

Special projects, included construction of 7.5 km of approach roads to the new Nechako River Bridge, realignment and reconstruction of the final 4.5 km of poor sections of the Germansen Landing Road between Fort St. James and the Nation River and 13.5 km of right of way fencing along Highway 16. Reconstruction and gravelling of 5.8 km of Kenney Dam Road and 3.1 km of roads within Stoney Creek Indian Reserve No. 1, were completed in preparation for paving. In all, a total of 7.5 km of main roads, 19.5 km of collector roads and 9.7 km of minor roads were either constructed or upgraded during the year.

Lakeshore Drive at Fort St. James was paved (1.6 km) as well as one intersection, one parking area, and one rest stop.

Bridges

Greer Creek Bridge No. 7002 was reconstructed using 15.2 m concrete box stringers (under a capital works program).

Nechako River Bridge No. 250 received 50% new decking and Nautley Bridge No. 6994 received 80% new decking.

A total of 73 bridges received attention during the year.

Mining Roads and Trails

Winter maintenance of the Omineca Mining Road by Vanderhoof District, employing hired equipment was extended from Germansen Landing to 22.5 km north of Germansen Landing.

Summer road maintenance was carried out this year, using hired trucks, loader and grader under the supervision of a Ministry foreman. Several washouts were repaired, some sections were gravelled: 34-mile, 35-mile, 36-mile and 43-mile bridges were replaced with culverts and the total length of road was graded.

Bridge repairs were carried out by the district bridge crew with extensive repairs to Nina Creek, Tenakihi and Germansen Bridges. Some fifteen other bridges received minor repairs and maintenance.

Funding for this work was supplied by the Ministry of Energy, Mines and Petroleum Resources.

McBRIDE DISTRICT

Roads

Maintenance: Spring break-up caused few problems in the District, with runoff virtually non-existent due to the very light snowfall. The only exception to this was in the Red Pass portion of Highway 16 where extensive machine patching had to be carried out during April and May to repair severely broken pavement.

A relatively dry summer again caused few problems. The dust control program was successful.

The winter proved to be a challenge, with record snowfalls in January in all areas of the District. Crews performed admirably, with ploughing and chemical applications the major activities. Highway closures were minimal and the Red Pass section of Highway 16 was closed only once due to freezing rain. There were several avalanches in Red Pass but only one minor slough reached the road.

Construction: A log stringer bridge over Eddy Creek was replaced with a 5 050 mm × 3 330 mm multiplate pipe-arch, which was bedded into the creek bottom to allow for fish passage.

There were 2.8 km of Mountain View Road reconstructed, while a total of 2.8 km of Mr. Robson Road and Hargreaves Road, both located in Mount Robson Park, was rebuilt and prepared for pavement. These last two roads were constructed with due regard for the Park environment, with minimal impact outside the road-bed. Regravelling was carried out on the Loos, Blackman and Dunster Roads. An interesting project was the construction of two viewpoints for Mount Terry Fox, one located 13 km south of Tête Jaune on Highway 5, the other more major site 7 km east of Tête Jaune on Highway 16. The latter site was developed into a very attractive rest area with the assistance of the Region 4 Landscape Crew.

Paving

Columbia Bitulithic of Vancouver resurfaced 48.7 km of Highway 16 from Tête Jaune to Moose Lake, as well as 2.8 km on Kinney Lake Road and Hargreaves Road near Mount Robson, and 3.7 km on Blackman Road at Tête Jaune.

Bridges

Apart from regular cleaning and deck patching activities, the 79 m double-span, double-single Bailey bridge at Dunster was converted to a triple-single by lifting the 4 m trusses into place in one piece. This now allows legal loads to use this bridge. Following this the Bailey spans were redecked. An existing log stringer bridge at Sand Creek was removed. Steel piles were driven and concrete stringers were purchased for this 30 m bridge which will be completed during the summer of 1982. A temporary Bailey bridge is being used as a detour.

Buildings

The District bridge crew constructed a new 1980 tonne salt shed at Red Pass.

WILLIAMS LAKE DISTRICT

Roads

Maintenance: Spring break-up problems in 1981 following a moderate winter and light snowfall were again minor, resulting in fewer road restrictions. Excellent cooperation from the logging industry helped to achieve this result.

Normal maintenance continued throughout the summer and fall with emphasis on ditching, gravelling, strengthening and dust control. Guardrail installation commenced at Likely following laying of new payment.

Snowfall during the winter of 1981–82 was light in the western portion of the district but very heavy in the Horsefly–Likely areas. Continuous freezing conditions, together with numerous snowfalls, required ever increasing use of sand and chemicals to combat ice road surfaces.

Construction: Major works were carried out on 86 km of road with emphasis on preparation for contract paving on Dog Creek, Horsefly and Likely Roads, as well as numerous subdivision and side roads. The community of Likely, for the first time, has a paved street system.

Reconstruction of portions of Horsefly and Likely Roads continued an annual program leading to complete upgrading of these roads. Major reconstruction of Chilcotin–Bella Coola Highway commenced on nine km of road within the Anahim Flats Indian Reserve. The Dean River Road north of Anahim Lake was extended a further four km to serve an isolated area. Improvements continued on 24 km of the road to Chezacut.

Bridges

Courson Bridge over Moffat Creek, south of Horsefly, was constructed to replace a private structure and provide public access to an area not previously served.

Replacement of understructure of Newton Bridge over Chilcotin River was completed, to allow legal loading for farm and logging traffic. In the Bella Coola Valley, detours were built for Nygaard and Thorsen Bridges No. 2. Major repairs were made to the Hagensborg Bridge, and many other bridges throughout the district received regular repairs and maintenance.

Buildings

British Columbia Buildings Corporation completed a new oil shed at Anahim Lake yard, made considerable improvements to the Williams Lake shop and have a new shop under construction at Hagensborg.

REGIONAL REPORTS

REGION 5

(D. P. Doyle, P.Eng., Regional Director Highways, Terrace)
Prince Rupert, Terrace, Dease Lake,
Smithers and Burns Lake Districts

PRINCE RUPERT DISTRICT

Roads

Maintenance: Maintenance crews continued work on ditching, flood control, gravelling and brushing throughout the summer months. Heavy snowfall in winter resulted in 139 avalanches reaching Highway 37A between Stewart and Meziadin. Snowploughing equipment was hard put to keep the roads open to traffic. The hazardous conditions resulted in nine road closures on Highway 37A and 41 on Highway 16.

Construction: Hanna Corner, on Highway 37 north of Meziadin Junction was reconstructed over a new route, a distance of 1.1 km. Further improvements were also made to the grade of Highway 37 from Surprise Creek to the Nass River in preparation for future paving.

In the Queen Charlotte Islands, work was completed on a new bypass route for the new B.C. Ferries terminal in Skidegate Landing. Shore protection on Towhill Road north of Masset was continued throughout the past year.

Bridges

Routine maintenance was carried on throughout the District. Bailey bridges were erected at the second crossing of the Bear River, Cullen Creek and Rufus Creek because of deterioration of the existing wood structures. The opening of the new 111 metre steel stringer bridge at the first crossing of Bear River occurred this August, replacing the two temporary Bailey bridges which had been used since the old bridge had burned down in July, 1980.

Garages

The four shops had a very busy year compounded by a high staff turnover. Three shops were accident free.

Buildings

The Prince Rupert office staff moved into its new office in October.

The Prince Rupert maintenance and mechanical crews finally were able to move into their new shop after some construction difficulties had been overcome.

Ferries

The M.V. *Kwuna* went in for her tri-annual refit from May 24th to June 23rd. During this time a barge and tug from Rivtow Marine Ltd. handled the traffic between Skidegate and Alliford Bay.

TERRACE DISTRICT

Roads

Maintenance: An extensive brushing program was undertaken on all major highways using student crews and a brushing machine. A number of old wooden culverts were replaced with corrugated iron pipe. Highway 25 and Yellowhead Highway 16 east received a fair amount of machine patching. Highway 25 shoulders were regravelled in the Kitimat area. Extensive ditching and cross-drainage was undertaken especially on all subdivision roads north of Terrace. A number of gravel pits were landscaped and prepared for future crushing.

Construction: Reconstruction was continued on an 8.7 km section of Old Lakelse Lake Road. Approximately 80% of the project was completed. A number of soil problems were encountered which were overcome.

A new road, Greenville Road, in the Nass Valley was partially established with 95% of the R/W clearing completed. A tote road was constructed on the north side of the Nass River which gave access to the west end of the project.

Approximately 857 m of 686 mm no-post guardrail was placed along Yellowhead Highways 16 and 25.

A number of minor projects were completed which involved repairing mud slides, installing new culverts and yard improvements.

This has been a continuing project on an 8.7 km section of old Lakelse Lake Road. The project involved construction on a new alignment and complete reconstruction of portions of the existing road. The road is an alternative route to Lakelse Road and serves a small rural settlement.

Snow Removal

One heavy snow storm hit the Terrace area in early January accompanied by high winds and drifting. Highway 16 west of Terrace was closed for 315 hours this winter—131 avalanches were recorded of which 41 reached the highway.

Bridges

Major bridge maintenance was undertaken on 10 bridges. Clear Creek bridge was replaced with a Bailey bridge. Wawelth Bailey bridge was shortened by 9 m to allow for legal loading. The old Skeena River bridge was given a major facelift. This involved repainting the entire structure, placing a new deck of Ekki wood and constructing new fence rails. A new temporary bridge at Polywog Creek on Highway 16 is being built.

Buildings

A concrete pad was constructed for the new steam cleaning area. A new shed was constructed to store Bailey bridge parts.

Ferries

New approach ramps were constructed at the Usk Ferry. The road approaches to the ramps were regravelled.

DEASE LAKE DISTRICT

Roads

Maintenance: This year's maintenance program focused heavily on drainage improvements and surface maintenance, throughout the District. Included in this program was the replacement of 10 wooden stave culverts with C.M.P., base strengthening and regravelling of various sections along the Cassiar Highway.

The dust control program was continued this year using flaked calcium chloride as the controlling agent. Materials were applied at 19 bridge sites, 18 major dust control sites and the entire length of the Cassiar access road, totalling 87 km.

Warmer than usual temperatures during May and June brought about heavy run-off conditions. These conditions resulted in a major fill failure on the Cassiar Highway and

.5 km of the Telegraph Creek Road being washed out. District crews replaced approximately 15 000 m^3 of material, completing the repairs by the end of June.

Construction: A continued program of ditching, widening and base strengthening was carried out on Highway 37 from the Tanzilla Bridge to the Stikine Bridge. In addition to these works, grade revisions were completed at 40 Mile Flat and Iskut. Major ditch construction, base strengthening and surfacing works were carried out on 91 km of the Cassiar Highway, in preparation for a graded aggregate seal. The end of July saw completion of the seal coating, bringing the District total to 176 km of paved dust free surface.

Day Labour improvements to the Atlin Highway involved major horizontal and vertical realignments from the Yukon border to Hitchcock Creek. Ditching, widening and gravelling constituted a major portion of this program, which extended to various locations along the Atlin Highway.

Snow Removal

Total snowfall was above average for the past ten-year period. District crews, on seven day coverage, undertook snow removal on a continuous basis. With the exception of two minor snow slides 50 km north of Dease Lake, all roads within the District remained open and in excellent condition throughout the winter.

Bridges

Annual maintenance including bridge washing, deck repair and crib replacement was carried out on 18 bridges within the District.

In addition to annual maintenance, four bridges were reconstructed. These works entailed replacement of the Halfway Bridge (a King Truss structure) with a 30 m Bailey bridge, complete construction of a 10 m log stringer structure at Gnat Lake, reconstruction of McKee Creek Bridge and an additional 3 m of triple single cord reinforced Bailey was attached to the Tanzilla Bridge. Several Bailey bridges sustained structural damage to end posts and panels upon impact with motor vehicles. Damaged posts and panels were replaced, effectively re-establishing the structural integrity of these bridges.

The bridge crew, displaying a large degree of versatility, completed a storage shelter to house the Dease Lake area salt requirement.

Buildings

A combined effort between District personnel and the British Columbia Buildings Corporation brought about major renovations in various locations through the District. Among these improvements were the completion of the automatic doors at the Good Hope Lake garage.

Extraordinary

During the latter part of June, the District survey crew noticed a large section of fill material had fallen away from the north side of the Stikine Hill (54 km south of Dease Lake). With the assistance of the Regional Geotechnical and Materials Branch a subdrainage system, incorporating the use of filter cloth and perforated culvert pipe, was developed in conjunction with a slope reconstruction design. Reconstruction of the fill slope began with the placement of a 3 000 m^3 shot rock berm. As the slope was reconstructed, great care and attention was taken to ensure that clean granular material was used and the optimum in compaction was obtained. The drainage design called for a portion of the system to be installed halfway up the slope, with the balance being installed in the ditchline on the west side of Highway 37. Reconstruction of the failed slope commenced during the first week of September. Placement of approximately 25 000 m^3 of fill material and the designed drainage system was completed on September 27, in accordance with the geotechnical specifications.

SMITHERS DISTRICT

Roads

Maintenance: There was very little snow during the winter of 1981, consequently, the District had much deeper frost penetration which led to a little longer than usual break-up period. Mild weather during break-up combined with drainage improvements instituted in the summer of 1980 resulted in less severe winter damage.

Summer weather was generally clear and hot, providing a good working environment for most maintenance activities.

Emphasis was once again placed on drainage, especially replacing old or damaged culverts.

Due to a paving contract in the Hazelton area, more patching was scheduled and accomplished in the western part of the District.

A calcium chloride dust control program was once again carried out with good results and received many favourable comments from local farmers.

Winter arrived early with our first snowfall recorded on October 6, 1981. Generally, the District experienced frequent snowfalls from mid-November through mid-February with above average accumulations at the beginning of January. This was reflected in the increased use of chemicals and higher accomplishments in ploughing activities.

Bridges in the District all received thorough inspections and minor repairs were carried out as required.

Construction: Six km of Babine Lake Road were rebuilt in 1981. Improvements consisted of changes to both horizontal and vertical alignments. This portion, just south of Doris Lake, was widened and strengthened as well.

A paving contract in the Hazelton area resulted in blacktop from Kispiox to the Hazelton Highlevel Road, the Hazelton Highlevel from Highway 16 to Hazelton, New Hazelton streets and Highway 16 east and west of New Hazelton. In total, 43 km of road received a new surface.

Traffic movements were greatly improved on the Smithers arterial with the installation of left and right turnslots and a traffic control device.

In addition to the above, street lighting and a left turnslot were added to the Smithers arterial at the Tatlow Road intersection.

Minor betterments consisted of upgrading local roads for paving, general drainage improvements, and some right of way landscaping.

BURNS LAKE DISTRICT

Roads

Maintenance: The 1981 winter, a series of freeze-thaw cycles, created a heavy need for sanding activities. The year 1982 brought in a great deal of snow and although hard pressed, the crews managed to stay ahead of the onslaught. Summer activities such as crack sealing and patching were intense in all pavements. Grading became difficult because of the long hot summer.

Construction: A fair amount of construction was carried on by the District forces which completed the paving and sealcoating of the Southbank project. Fourteen smaller projects were completed by capital day labour and minor betterment funding. There were 7.7 km of fencing along Highway 16 contracted under the Schedule II program.

Bridges

The bridge crew assisted in completing trial runs of the new floating drydock facilities on François Lake. They also completed new sidewalks on the Burns Lake

Trestle and modification of the Fulton River Bridge. Routine maintenance was carried out on all bridges.

Buildings

Southbank received general maintenance and a piece of property has been selected for a new complex, sometime in the future. Houston had new shop floors and general maintenance completed. Burns Lake electrical supply to the roads and bridges building was upgraded and more electrical outlets were provided for engine heaters. The mechanical shop had a new coffee room added.

Ferries

The Omineca Princess ran her schedule without too much delay. When she did go into a major refit for five weeks the Jacob Henkel was brought into service.

REGIONAL REPORTS

REGION 6

(B. A. L'Hirondelle, P.Eng., Regional Director Highways, Nanaimo)
Nanaimo, Saanich, Port Alberni and
Courtenay Districts

NANAIMO DISTRICT

Roads

Maintenance: An extensive Minor Betterment Program was completed with most of the work geared to recap paving of deteriorated streets, together with correction of numerous drainage problems—the more notable being under-drainage in the Village of Lake Cowichan. A very successful sealcoating program was carried out on Gabriola Island using high float emulsion. New rest areas were completed on the Trans-Canada Highway at Cassidy and on the Cowichan Valley Highway. Subdivision and permit activity increased by 50% due to the very rapid growth rate in the area. Contracts were awarded to move coldmix asphalt to Thetis Island and crushed gravel to Gabriola Island by barge, resulting in a considerable savings in material movement. Wheelchair drops were provided on the Trans-Canada Highway and Island Highway through the City of Nanaimo.

Considerable flood damage repairs were completed in April 1981, carried over from the winter flood conditions.

Snowfall was heavier and general winter conditions more severe than those of the past few years which resulted in heavier salt and ploughing costs. However, these conditions were handled satisfactorily and roads maintained in good winter driving condition. Green Mountain ski area was ploughed by Ministry equipment with the upper section to the ski lodge ploughed by the lodge under Ministry subsidy.

Construction: A new connector was constructed joining the Old Cowichan Lake Road with the new Cowichan Valley Highway providing an alternative route. Conflicts between pedestrians and vehicles were encountered and widening was provided for paved shoulders on Crofton Road and on Old Cowichan Lake Road. Four laning was created on the Trans-Canada Highway through Duncan by eradicating thermo plastic lane lining and relining the existing pavement with prohibition of parking. A portion of Chapman Road was reconstructed, also a portion of Doupe Road. Akenhead Road was reconstructed and paved and Jamison Road was paved. A number of rock corners were drilled and blasted on Mountain Road and rock used for rip rap. A portion of Yellowpoint Road was widened and recap paved. The junction of Nicol Street and Terminal Avenue (Trans-Canada Highway) was widened to accommodate heavy truck turning movement.

Bridges

Burnt Bridge was rebuilt utilizing pre-cast concrete stringers and a foot bridge was built over Wilkinson Creek to provide a walkway for school children. All bridges were inspected, repaired and cleaned. Maintenance was carried out as required.

Buildings

A salt shed was constructed in the Cobble Hill yard to provide a greater supply of salt for the Malahat.

SAANICH DISTRICT

Roads

Maintenance: Rain was the topic for the whole year. High water tables precipitated several mud flows and landslides throughout the District. Patching activities were affected and had to be squeezed into the few good days. Heavy snowfall in January, followed by warm rains caused many road washouts and flooding of basements.

The District has continued with the program to stabilize gravel shoulders in the vicinity of area schools, to provide a more attractive facility for children.

The District assisted the Traffic Branch with signal installations on Highway 1A at Stormont Avenue in View Royal, and at Jacklin Road in Langford. The number of signalized intersections in the District is now 33. Three other sites are up to warrants and are planned for the next fiscal year.

The District manufactured 4 298 metres of 69 cm reinforced concrete guardrail for use in the Region, as well as the concrete bases for Electrical Branch luminaire installations.

Notable minor betterments were the widening of Razor Point Road and the chip sealing of 25 km of District roads. Several bus stops were improved and two pullouts constructed on the Royal Oak off ramps.

The District called tenders for maintenance of landscaped areas on Highway 17 from Tolmie north to Saanich Road. The contract was awarded to G.W. Landscaping Ltd. for the amount of $22,800.

There were 436 lineal metres of concrete guardrail placed on the Trans-Canada Highway through Goldstream Park and 233 metres on Sooke Highway 14.

Construction: The major project undertaken was the re-cap of 7.2 km of View Royal roads following the sewer installation. The curve on Highway 14 at Glen Lake was improved and a left turn lane constructed. Helmcken Road at the new Victoria General Hospital was completed and the turnslot on Highway 1 at Millstream was extended for greater storage. The District called a tender for the supply and placement of 2 065 tons of asphalt concrete on Mt. Belcher Heights, North End Road and Beaver Point Road on Saltspring Island.

Bridges

The pre-stressed concrete box stringers were delivered and placed on Phillips Bridge and the approaches paved. The abutments for Edwards Bridge were constructed and the deck system will be completed in 1982–83.

Rosemond and Clinch Bridge both had the asphalt decking replaced with 4 × 12 running planks over the laminated sub-decking. A sidewalk was added to the Harris Cover Acrow bridge and district crews replaced 25 pilings and re-decked the north span of the Jordan River Bridge. High water eroded the approach fill of Kirby Bridge and new abutment piles were driven and the deck system replaced.

Subdivisions and Permits

The changeable 1982 housing market created a heavy load for District staff. The year started with a shortage of building lots. Contractors were faced with lay-off of employees and a push was on to expedite subdivision approvals. A building boom followed but soon eased, as high interest rates peaked. This was followed by another rush at year's end, as developers rushed to take advantage of the Federal Government M.U.R.B. program.

The District issued permits for three major projects undertaken on Provincial roads. The B.C. Hydro underground transmission circuit on Craigflower Road, at 230 KV, is the highest voltage line placed underground on a Provincial Highway. The Capital

Regional District awarded a $5,350,000 contract for sewer installation in View Royal and a large contract for water service installation for the Magic Lake subdivision on Pender Island.

Equipment Fabrication

The shop produced plough mounts, underbody ploughs and hydraulic systems for 200 four-ton units and 15 tandem trucks for distribution throughout the Province. A Mack 6 × 6 was fully equipped for winter service with a 12-yard body sander with twin chain feed to the sand spreaders.

PORT ALBERNI DISTRICT

Roads

Maintenance: Emphasis was on a continued program of brushing, shoulder widening, ditching and dust control on District Highways and roads. A total of 330 000 litres of dust pallatives was applied, including the Bamfield Road, which experiences heavy industrial and recreational traffic.

An above average winter contributed to heavy winter activity, with a snowfall recorded at 1 527 cm in Sutton Pass on the Alberni-Tofino Highway 4.

Approximately 12 km of new roads were established in the Parksville area. A total of 260 subdivisions and 520 permits was processed, 75% of which were in the Parksville-Nanoose area, an indication of the phenomenal growth of this area.

Extensive work was performed upgrading the Lantzville, Yambury, and Errington Roads by maintenance crews.

Construction: Passing lanes were constructed on the Alberni-Tofino Highway 4 near Kerr Creek. Taylor River Rest Area was completed. A progressive ditch construction and shoulder widening program was undertaken on the Ucluelet-Tofino Road near Tofino.

In the Parksville area a left turnslot at the busy Lee Road-Highway 19 intersection has been completed. Reconstruction of Dorcas Point Road is progressing to alleviate a difficult hill.

Bridges

Deer Creek bridge located on Beaver Creek Road in Port Alberni has been relocated and realigned with the construction of a new precast concrete stringer bridge.

COURTENAY DISTRICT

Roads

Maintenance: A generally wet year was experienced, local flooding in the Courtenay area occurred several times during the fall and early winter, and considerable remedial work was carried out on ditches and drainage patterns. Emphasis was again placed on machine brushing and ditching of area roads. Widening and gravelling of secondary roads continued, with 13 km improved. Two new rest areas, at Eve River and Buttle Lake were created. Winter was cool and wet, with snowfall being higher than in recent years, and still being encountered at year-end.

Construction: Work of widening of the Island Highway North of Courtenay continued. Recapping of 2.5 km of District road was carried out, and 0.8 km of new pavement was laid. Sealcoating of 26 km of existing pavement on Quadra and Hornby Island, and in the Courtenay-Campbell River areas was completed. An extension of Condensory Road, 1.6 km was constructed to gravel grade. Reconstruction of the

Denman Hill was commenced, and was 50% complete at year-end. There were 470 m of 690 mm guard rail installed in the district. Fill approaches to the Cluxewe bridge were under construction at year-end. Widening of Campbell Way, Port McNeill, 1.8 km including some storm drainage, was completed to gravel grade.

Bridges

There were 30 m of double single chord reinforced Acrow bridge installed at the Keogh River on Highway 19, when the log stringer structure failed. Work of construction of a new bridge at the Cluxewe River took place over the winter, and was still in progress at year-end. The new structure is concrete box beams on steel piling and concrete, 44 m in length. Port Kusam Bridge was strengthened and a new deck applied. A total of 43 District bridges had maintenance work carried out on them, primarily washing, painting, deck and rail repairs.

Ferries

The Region 6 Ferries District is responsible for 12 major ferries and operates the following nine Ministry routes on Vancouver Island and the Mainland:

Alert Bay-Sointula-Port McNeill
Campbell River-Quadra Island
Comox-Powell River
Powell River-Texada Island
Chemainus-Kuper Island-Thetis Island
Vancouver Island-Denman Island
Denman Island-Hornby Island
Nanaimo-Gabriola Island
Quadra Island-Cortes Island

To help alleviate heavy traffic on the Campbell River to Quadra Island route the M.V. *Tachek* once again operated in conjunction with the *Quadra Queen II* during the summer months.

Additional service was also provided on the Comox-Powell River route with the *North Island Princess* augmenting the service of the M.V. *Sechelt Queen* for two round trips daily. To maintain service on the Texada Island route the M.V. *Albert J. Savoie* operated 12 hours per day.

A contract for the construction of the M.V. *Quinsam* was awarded to Vancouver Shipyards. The *Quinsam* is a 70-car ferry which will replace the *Quinitsa* on the Nanaimo-Gabriola Island route.

The *Princess of Vancouver* was purchased from the C.P.R. and a conversion contract awarded the Burrard-Yarrows Shipyard. The "Princess" will replace the M.V. *Sechelt Queen*, and with her carrying capacity of 135 cars and 700 passengers, delays should not be encountered on the Comox-Powell River route.

TRANSPORTATION POLICY

REPORT OF THE DIRECTOR OF TRANSPORT POLICY ANALYSIS

G. A. Clark

The Branch continues to play an expanding role in activities of the Ministry related to Provincial transport policy and actions by the transportation industry and the Federal government which have implications for the Province.

With respect to railway transportation, the Branch continues to monitor rail abandonment proposals, double-tracking projects and passenger service on the national railways. Representations were made to the Canadian Transport Commission at public hearings dealing with the proposed abandonment of CP Rail's Cowichan Subdivision on Vancouver Island and the proposed tunnels and double-tracking projects at Rogers Pass. Work was initiated with Transport Canada, the Canadian Transport Commission and the other western provinces to identify any improvements to the railway network in the Lower Mainland that may be required to accommodate traffic growth in the next 10 years. The Branch responded to proposals by the Federal government to eliminate the statutory rate for grain and to increase mainline capacity in British Columbia.

Over the last four years the Branch has administered a capital rehabilitation program for the Fort Nelson extension on the British Columbia Railway. The program was completed in 1981 at a total cost of $41.4 million. Operating subsidies totalling $24.2 million were paid to the BCR for operation of the Fort Nelson and the rail passenger service to Lillooet and Prince George. In addition, a total of $2.4 million was provided to the Railway for the rehabilitation of one-rail passenger car and purchase of new engines for the remaining cars.

British Columbia's involvement in the Federal government's Urban Transportation Assistance Program was coordinated by the Branch. The program provides funds on a cost-shared basis for railway grade separations and selected urban transportation projects. A total of $24.5 million is available for projects in British Columbia during a six-year period ending on March 31, 1984. There were 14 projects under way at year-end and a further 20 projects have received approval in principle.

A review of port and harbour facilities on the coast of British Columbia was undertaken as a joint project with the Federal government. The condition and suitability of wharves and harbour facilities at about 100 locations are being evaluated in the course of this study. The Branch also evaluated changes in ports legislation proposed by the Federal government with implications for the major ports in the Province.

The Branch responded to policy proposals affecting air services across Canada and made representations to the Federal government. Presentations were made to the Canadian Transport Commission on air service requirements in the northeast British Columbia and work was completed on alternative sites for an airport to serve Tumbler Ridge and the northeast coal developments.

An economic forecast for Vancouver Island was prepared as input to the Vancouver Island Transportation Project. This project is an ongoing program dealing with transportation requirements on Vancouver Island and to/from the Mainland over the next 10 to 15 years.

The Branch also administers the Air Transport Assistance Program which is a grant-in-aid program designed to encourage and reinforce air transport services within the Province by assisting in the development of community airport facilities.

During the 1981/82 fiscal year, the program received and reviewed 30 applications for capital assistance. There were 21 projects, including 16 ongoing projects from previous years, recommended for award of funds.

At the present time there are 41 applications on hand requesting approximately $34 million in initial funding or additional capital assistance for communities which have previously received funds through the program.

Following is a summary of expenditures under the program, an estimate of the program's contribution to the provincial economy, and a list of grants approved during the 1981/82 fiscal year.

Fiscal Year 1981/82

A. Demand on Program:

1. Total starting budget	$4,000,000
2. Awards to Municipal Governments	2,988,000
3. Projects undertaken by Government Ministries	465,277
4. Program administration	223,756
5. Program "efficiency savings"	200,000
Unexpended Balance	122,966
Total Grants and Expenditures	$3,677,033

B. Contribution to the Economy:

It is estimated that $3.677 million expended through the program in 1981/82 contributed to the Province's economy in the following manner:

1. Creation of approximately 1,044 man-months of labour (87 man-years).
2. Expenditure of approximately $1,350,000 on materials.
3. Expenditure of approximately $550,000 for professional services.

AIR TRANSPORT ASSISTANCE PROGRAM

GRANTS APPROVED 1981/82 FISCAL YEAR

Airport Location and Applicant for Aid	Approved Project Items	Grant and Date of Award
Anahim Lake Cariboo Regional District	Enlarge apron, site fencing, cattleguard, gravel tie-down area	$75,000 (81-06-29)
Atlin District Board of Trade	Rock blasting, removal and placement of rock, earthworks for sub-base for runway.	$400,000 (81-06-08)
Blue River Thompson-Nicola Regional District	Fencing	$25,000 (81-06-29)
British Columbia Aviation Council	Airport Owners and Operators Division set-up costs	$175,000 (81-10-02)
Chetwynd Village of Chetwynd	Widen runway to 100′, extend runway to 4,500′ N.D.B., runway lighting system	$200,000 (81-06-29) $300,000 (81-08-07)
Creston Town of Creston	Pave 4,000′ × 75′ runway	$150,000 (81-06-29)
Dease Lake Ministry of Transportation and Highways/ Airport Society	Hydro seeding Site services, legal survey, terminal building	$45,000 (Internal) $155,000 (81-08-26)
Elk Valley East Kootenay Regional District	Detailed design, initial construction of new airport	$100,000 (81-06-29)
Fort St. James Village of Fort St. James	Enlarge apron and upgrade groundside area	$75,000 (81-06-29)
Fraser Lake Village of Fraser Lake	Placement of crushed gravel on runway	$100,000 (81-06-29)
Gibsons-Sechelt Village	Construction of new apron and groundside facilities	$175,000 (81-06-29)
Harrison Hot Springs Village	Construct new float plane dock and floats	$50,000 (81-09-14)
Houston District	Place crushed gravel on runway	$150,000 (81-06-15)
Leo Creek Ministry of Forests	Minor cleanup work following construction of new airstrip	$25,000 (81-09-10)
Likely Cariboo Regional District	Design and construction of new 3,500′ airstrip	$50,000 (81-06-29)

AIR TRANSPORT ASSISTANCE PROGRAM—*Continued*

GRANTS APPROVED 1981/82 FISCAL YEAR

Airport Location and Applicant for Aid	Approved Project Items	Grant and Date of Award
Lillooet Village/Ministry of Transportation and Highways	Place crushed rock, hot-mix asphalt, site services	$250,000 (81-06-15)
	Pave runway, taxiway and apron	$350,000 (81-09-11)
Masset City	Upgrade float plane base	$50,000 (81-09-14)
Merritt City	Extend runway, develop groundside facilities	$150,000 (81-06-29) $100,000 (81-09-11)
Pemberton Village	Upgrade apron and access road	$183,000 (81-06-23)
Revelstoke Columbia-Shuswap Regional District	Upgrade groundside facilities	$75,000 (81-09-15)
Texada Island Powell River Regional District	Upgrade airstrip	$50,000 (81-06-29)

REPORT OF THE DIRECTOR OF ENGINEERING INSPECTION

F. H. Christensen, P.Eng.

This Branch processes construction applications, inspects pipelines, railways, aerial tramways and certifies operating personnel for railways and aerial tramways. It is also the regulatory authority administering the *Railway Act* and the *Pipeline Act*.

The Branch is represented on several Canadian Standards Association committees and sub-committees including four pipeline committees and the passenger ropeways committee, the environment/resource/land use working committee of the energy project coordinating committee and the crossing and signals technical working committee.

Projects, new procedures or events of an exceptional nature in 1981/82

(a) Aerial Tramways —Virtual completion of implementation of the computer based data storage and retrieval system.

—Continued the program of avalanche potential analysis and the reviewing of snow safety plans as related to passenger safety on aerial tramways.

—Conducted three seminars to members of the industry relating to a better understanding of the requirements of the *Railway Act* and pursuant regulations and of the National Standard of Canada CSA-Z98-M78 Aerial Tramways.

(b) Railways —Initiation of three new inspection programs:

Dangerous Commodities
Train Operations
Accident Investigation.

—Monitoring of construction was started on the British Columbia Railway Tumbler Ridge branch line. An auxiliary track inspection officer was hired to implement the program.

—Review of drawings for various structures on the Tumbler Ridge branch line was started and continues.

—A major detailed review of the proposed new British Columbia Railway general operating instructions was completed.

(c) Pipelines —The looping of sections of Pacific Northern Gas Company's transmission line to accommodate Ocelot's methanol plant at Kitimat was completed.

Aerial Tramway Industry

Scope of Operation—95 areas (1 new)

Installations	Existing	New	Modfied	Total
Triple chairlifts	22	1		23
Double chairlifts	45		2	45
T-Bars	69		2	69
Platter lifts	5			5
Handle tows	42	1		43
Rope tows	54	1		55
Reversible tramways (double)	3		1	3
Reversible tramways (5 industrial and 5 river crossings)	10		1	10
Gondolas	2	–	–	2
Total	252	3	6	255

Annual inspections	252
Acceptance tests for new installations and modifications	2
Operational inspections	190
Progress inspections	16
Modifications and improvements inspected	6
Major incidents investigated	17

Major Aerial Tramway Accidents

1. High winds causing deropements and consequent grip failure (2).
2. High winds causing chair to be blown over communication lines.
3. Skier out of track causing injury to another passenger.
4. Surface lift deropement.
5. Swinging chair at loading area causing deropement (2).
6. High winds causing trees to be blown across lift line (2).
7. Cracked rope grips on chairlift.
8. Several cases of gearbox failure resulting in evacuations by rope (3).
9. Passenger falling from chair (2).
10. Bullwheel slipping on shaft.
11. Chairlift deropement and consequent rope failing to remain in the rope catcher.

Railway Industry

Railways under the jurisdiction of the Ministry of Transportation and Highways:
British Columbia Railway
British Columbia Hydro and Power Authority Railway
British Columbia Harbours Board Railway
Byron Creek Collieries Ltd. Railway
Vancouver Wharves
Canadian Forest Products Railway
Crown Zellerbach Logging Railway
and some 51 other industrial railways, plus 5 recreational railways.

Scope of Operation

Railway Trackage	
B.C. Railway Mainline	2 061 km
Yard	597 km
Trader	220 km
B.C. Hydro Railway Mainline	126 km
Yard and Spur	103 km
B.C. Harbours Board Railways	38 km
Industrial Railways	371 km
Total	3 516 km
Major Rail Yards	15 Yards
Motive Power	
Locomotives	190 Units
Other	74 Units
Total	264 Units
Bulk Storage Facilities	47
Road Crossings	
Public	398
Industrial	52
Farm	221
Access	244
Signalized	88
Applications and Certifications Processed	
Track	18
Bridges and other	14
Road crossings	32
Automatic signalizations	7
Bulk storage facilities	6
Pipe crossings	30
Operating personnel	111
Inspections	
Locomotive and other motive power	198
Major railway yards	9
Industrial railways	19
Mainline operation and occupational safety	6 100 km
Industrial track inspected	238 km
Road crossings	74
Occupational safety	15
Dangerous Commodities Inspections	
Bulk storage facilities	18
Loading/unloading facilities	11
Yard-railcar	18
Leaking cars	10
Derailments	3
Accidents Reported and Investigated	
Common carriers	62
Industrial railways	23

Pipeline Industry

Present Scope

Major transmission pipelines	2 125 km
Gathering and flow and other transmission lines	7 574 km
Compressor and pumping stations	250
Liquid natural gas plants	1

Applications Processed

Pipeline	241
Compressor and pump	15 (20 858 kw)
Crossings	456
Length of pipelines constructed	
Gas	279 km
Oil and multiphase	54 km
Water	36 km
Total	369 km

Inspections

Pipeline field inspections	716
Pump and compressor station inspections	160
Pipeline failures reported and investigated (see list)	44

Pipeline Failures in British Columbia for Pipelines Under the Pipeline Act

Date	Company	Location	Commodity	Reason	Amount
81-04-01	Scurry-Rainbow	Eagle	Water	Pinhole weld	—
81-04-02	B.P.O.G.	Bullmoose	Gas	External damage	—
81-04-01	Petro-Canada	Peejay	Oil	Internal corrosion	1.0 m³
81-04-08	Petro-Canada	Fort St. John	Gas		—
81-04-08	Petro-Canada	Clarke Lake	Salt water	Internal corrosion	3.2 m³
81-04-10	Petro-Canada	Peejay	Gas		—
81-04-23	Monsanto	Rigel	Gas	External corrosion	—
81-04-24	Suncor	Eagle	Oil	Mechanical failure	4.7 m³
81-04-24	Petro-Canada	Peejay	Oil	Human error	60.0 m³
81-04-26	Norcen Energy	Eagle	Oil	Vandalism	15.9 m³
81-05-22	Petro-Canada	Peejay	Salt water	External corrosion	1.0 m³
81-05-06	Petro-Canada	Peejay	Water	Internal corrosion	—
81-05-20	Petro-Canada	Peejay	Gas	Internal corrosion	—
81-05-19	Petro-Canada	Clarke Lake	Gas	Internal corrosion	—
81-05-22	Norcen	Taylor	Diesel fuel	External corrosion	—
81-05-21	Inland	Peachland	Gas	Backhoe (external damage)	—
81-05-20	Inland	Vernon	Gas	Backhoe	—
81-06-17	B.C. Hydro	White Rock	Gas	Backhoe	—
81-06-23	Columbia	Creston	Gas	External corrosion	—
81-06-25	ICG Utilities	Fort St. John	Gas	Backhoe	—
81-07-06	Petro-Canada	Peejay	Oil	External corrosion	0.1 m³
81-07-10	Northland Utilities	Dawson Creek	Gas	Cat. bulldozer	—
81-07-10	Dome Petroleum	Boundary Lake	Salt water	Split seam	0.1 m³
81-07-31	Petro-Canada	Stoddart	Gas	Hit with rat hole drill	—
81-07-05	Norcen	Eagle	Oil	Mechanical equipment failure	3.1 m³
81-08-12	Scurry-Rainbow	Eagle	Oil, gas	Fire	—
81-08-15	Suncor	Blueberry	Gas	Weld failure	—
81-08-21	Suncor	Blueberry	Oil	Bulldozer	28.5 m³
81-08-27	Pacific Northern Gas	Skeena River	Gas	Washout	—
81-09-23	Dome	Laprise	Gas	Internal corrosion	—
81-09-29	Uno-Tex	Yoyo	Gas	Thermal expansion	—
81-10-06	Suncor	Boundary Lake	Gas	External corrosion	—
81-10-15	Columbia Natural Gas	Michel	Gas	Grader	—
81-08-16	Suncor	Blueberry	Gas	External corrosion	—
81-10-29	B.C. Hydro	Coquitlam	Gas	Backhoe	—
81-12-02	Trans-Mtn. Enterprises	Burnaby	Jet Fuel	Human error	5.0 m³
81-12-11	Wainoco Oil and Gas	Flatrock	Oil	Fire	—
81-08-29	Inland	Fernie	Gas	Backhoe	—
81-12-23	Petro-Canada	Beg	Gas	Mechanical failure/fire	—
81-12-31	Petro-Canada	Parkland	Gas	Overpressure	—
82-01-08	Esso Resources	Clarke Lake	Gas	Bulldozer	—
82-01-24	Dome	Nig	Gas	Corrosion	—
82-01-25	Norcen Energy	Weasel	Oil	Backhoe damage	440 m³
82-03-03	Inland Natural Gas	Kamloops	Gas	Road scraper	—

Failures

Gas line failures	27
Oil line failures	12
Water line failures	5
Total	44
Volume of oil spilled	563.3 m³

MOTOR CARRIER BRANCH

The activities of this Branch are recorded in the Annual Report of the Motor Carrier Commission published under separate cover.

MOTOR VEHICLE

MOTOR VEHICLE DEPARTMENT

The Motor Vehicle Department is responsible for the licensing and registering of motor vehicles, mechanical inspection and safety standards, monitoring of vehicle weights and dimensions, the determination of ability and fitness of persons to operate motor vehicles, the licensing and recording of vehicle operators, and the support and development of road user and driver improvement programs.

The Department comprises three Branches with direct responsibility to the Superintendent of Motor Vehicles. These are Vehicle and Drivers' Licence Branch, Standards and Compliance Branch, and Administration and Safety Branch.

A brief summary of activities indicates that the total number of registered vehicles in the 1981 licence year was 2,620,795, an increase of 92,412 or 3.65 per cent over the 1980 total.

Original driver licences issued up to December 31, 1981 were 105,677, a decrease of 1,933 or 1.8 per cent less than the 1980 total. The total number of licensed drivers as of December 31, 1981 was 2,044,721, an increase of 94,385 or 4.8 per cent over the 1980 total. There were 1,170,963 male drivers and 873,758 female drivers.

The Motor Vehicle Inspection Program inspected 590,921 vehicles with 149,744 or 25 per cent rejected during the year to December 31,1981.

REPORT OF THE DEPUTY SUPERINTENDENT OF VEHICLE AND DRIVERS' LICENSING

P. K. Jackman

The Deputy Superintendent of Motor Vehicles directs the activities of the Vehicle Licence Division and the Drivers' Licence Division.

VEHICLE LICENCE DIVISION

The Vehicle Licence Division is responsible for the licensing and registering of motor vehicles, the issuance of permits, reciprocity agreements, the collection of revenue under the *Motor Vehicle Act, Commercial Transport Act, Social Service Tax Act, Insurance (Motor Vehicle) Act,* the *Motive Fuel Use Tax Act,* and the coordination of licence and insurance programs as they affect the Motor Vehicle Department.

The personalized number-plate program continued to receive wide public acceptance during 1981. At December 31, 1981 a total of 12,784 applications had been processed. The entry of personalized number-plates into the main vehicle files went "on-line" in early 1981 with a dedicated terminal for updating the data base.

The Vehicle Licence Division controls directly the issuing activity of 112 outlets throughout the Province, and indirectly the licensing function conducted through the Insurance Corporation's agency force that consists of approximately 660 offices. The 112 Government related outlets are comprised of 15 Motor Licence Offices, 57 Government agents and 41 Motor Vehicle Department appointed agents. The 15 Motor Licence Offices are staffed with employees of the Motor Vehicle Department (Ministry of Transportation and Highways) while the Government agencies are staffed by employees of the Ministry of Finance, but report to this Division for all motor vehicle issuance.

The Motor Vehicle Department appointed agents are appointed by the Department and consist of credit unions, municipalities and private businesses or individuals. Usually such appointments are made in remote areas of the Province or where the population does not warrant a Motor Licence Office or Government Agency.

VEHICLE LICENCES

The total number of vehicles licensed during 1981 was 1,809,829, a decrease of 70,553 or 3.75% less than the 1980 total.

Passenger vehicles licensed totalled 1,145,369, a decrease of 35,778 or 3.03% less than the 1980 total.

Commercial vehicles licensed totalled 427,179, a decrease of 22,031 or 4.90% less than the 1980 total.

Motorcycles licensed were 44,499, an increase of 2,231 or 5.28% over the 1980 total.

Trailers licensed in 1981 totalled 192,832, of which 29,451 were commercial trailers and 163,381 were utility trailers.

FIELD SERVICE OPERATIONS

The Field Operation consists of:

Motor Vehicle Department Outlets

- Abbotsford
- Burnaby
- Chilliwack
- Cloverdale
- Kamloops
- Maple Ridge
- Mission
- New Westminster
- North Vancouver
- Richmond
- Trail
- Vancouver—Commercial Drive
- Vancouver—Georgia Street
- Vancouver—MacDonald Street
- Victoria

Total Motor Vehicle Department Outlets	15
Total Permanent Staff	139

Registered Vehicles at December 31, 1981

	1980	1981	Increase	%
Passenger Vehicles	1,526,950	1,573,482	46,532	3.05
Motor Homes	35,330	38,092	2,762	7.82
TOTAL PASSENGERS	1,562,280	1,611,574	49,294	3.16
Commercial Vehicles:				
Regular Commercial	544,025	562,980	18,955	3.48
(A) Farm Trucks	24,798	30,828	6,030	24.32
(F) Farm Tractors	667	963	296	44.38
(P) Prorate	3,004	3,231	227	7.56
(T) Logging	1,219	1,746	527	43.23
(X) Industrial	7,434	10,134	2,700	36.32
TOTAL COMMERCIAL	581,147	609,882	28,735	4.94
Commercial Trailers	45,457	44,658	(799)	(1.76)
Utility Trailers	261,889	268,113	6,224	2.38
Motorcycles	77,610	86,568	8,958	11.54
TOTAL VEHICLES REGISTERED	2,528,383	2,620,795	92,412	3.65

Licensed Vehicles at December 31, 1981

	1980	1981	Increase	%
Passenger Vehicles	1,181,147	1,145,369	(35,778)	(3.03)
Commercial Vehicles:				
Regular Commercial	416,805	395,836	(20,969)	(5.03)
(A) Farm Trucks	22,853	21,325	(1,528)	(6.69)
(F) Farm Tractors	504	383	(121)	(24.01)
(P) Prorate	1,727	2,809	1,082	62.65
(T) Logging	1,219	1,504	285	23.38
(X) Industrial	6,102	5,322	(780)	(12.78)
TOTAL COMMERCIAL	449,210	427,179	(22,031)	(4.90)
Commercial Trailers	30,653	29,451	(1,202)	(3.92)
Utility Trailers	177,154	163,381	(13,773)	(7.77)
Motorcycles	42,218	44,449	2,231	5.28
TOTAL VEHICLES LICENSED	1,880,382	1,809,829	(70,553)	(3.75)

DISTRIBUTION OF MOTOR VEHICLES

The following table provides information concerning the number of licences issued and their locality. This table cannot be regarded as an accurate population count of vehicles in the various parts of the Province as the owners move frequently from one area to another and vehicles are often sold to new owners residing in different localities than the previous owners. The table does, however, provide an indication of how vehicles are distributed throughout the Province.

Province of British Columbia
Motor Vehicle Population Statistics for Licensed Vehicles
1981

Name	District Code	Passenger Vehicles	Commercial Vehicles	Utility Trailers	Commercial Trailers	Motorcycles
Abbotsford	190	21,610	7,243	2,911	433	969
Agassiz	036	1,856	907	331	20	86
Alaska Highway	510	3,191	3,263	1,043	101	243
Aldergrove	191	7,527	3,742	1,374	292	348
Alvin	514	2	1	—	—	—
Armstrong	085	2,368	1,745	572	96	108
Ashcroft	042	1,629	1,158	423	35	115
Barriere	159	931	971	287	77	49
Bella Coola	083	431	647	113	13	29
Blue River	161	159	163	43	10	6
Boston Bar	044	351	221	57	5	18
Bralorne	046	74	102	13	—	10
Burnaby	103	67,451	16,277	5,231	3,423	2,063
Burns Lake	048	1,583	1,763	640	125	81
Campbell River	010	9,591	5,069	2,695	144	431
Cassiar Mines	182	317	370	85	7	50
Castlegar	123	4,864	2,352	1,068	75	204
Chase	050	2,618	1,846	772	89	104
Chemainus	017	1,771	1,023	453	59	72
Chilliwack	038	19,221	7,310	3,456	421	948
Clinton	052	573	656	168	48	27
Cloverdale	028	29,764	9,680	4,087	576	986
Courtenay	012	13,375	6,762	3,975	153	898
Cowichan	018	1,844	1,130	517	26	96
Cranbrook	125	7,672	4,844	1,980	659	353
Creston	127	3,901	2,708	1,017	140	216
Dawson Creek	167	5,555	5,331	1,433	461	231
Duncan	019	13,581	6,522	2,780	424	527
Elkford	516	2,163	1,789	672	21	156
Enderby	087	1,894	1,496	458	140	73
Fernie	131	4,191	3,145	1,001	178	189
Fort Nelson	181	1,246	1,585	315	160	104
Fort St. James	185	888	942	281	75	54
Fort St. John	169	6,886	8,406	2,011	756	407
Ganges	023	2,551	1,196	372	29	165
Golden	133	2,223	1,817	620	90	96
Gold River	016	727	398	216	5	57
Grand Forks	089	2,761	1,783	597	146	127
Greenwood	091	986	927	195	53	45
Haney	032	17,016	6,106	2,824	216	711
Hazelton	054	916	1,013	246	69	66
Hope	040	2,308	1,386	381	108	86
Houston	056	1,448	1,475	433	137	104
Hudsons Hope	186	1,501	1,562	430	107	88
Invermere	135	2,215	2,050	577	129	120
Kamloops	157	27,527	14,898	5,685	867	1,425
Kaslo	137	551	418	132	21	54
Kelowna	093	38,544	15,455	7,411	976	1,716
Keremeos	095	1,254	968	272	27	47
Kimberley	139	3,389	2,238	1,061	53	203
Kitimat	058	4,051	1,995	833	61	227
Ladysmith	021	3,595	1,817	772	57	164
Lillooet	059	1,005	838	186	48	80

Province of British Columbia
Motor Vehicle Population Statistics for Licensed Vehicles
1981—Continued

Name	District Code	Passenger Vehicles	Commercial Vehicles	Utility Trailers	Commercial Trailers	Motorcycles
Lytton	061	364	335	85	8	26
McBride	171	477	586	143	43	48
Merritt	063	2,787	2,258	820	132	141
Mission	034	9,432	3,845	1,411	102	389
Nakusp	141	831	829	357	40	60
Nanaimo	006	24,136	9,862	4,611	298	1,173
Natal	143	1	11	—	—	—
Nelson	150	6,475	3,034	1,252	98	316
New Denver	145	458	317	104	7	26
New Westminster Area	003	63,719	14,674	6,407	1,730	2,214
Northern Vancouver Island	515	6,767	4,837	1,579	102	421
North and West Vancouver	004	67,735	9,077	5,050	680	2,059
Ocean Falls	183	39	47	11	2	1
Oliver	099	2,777	1,628	559	64	83
100 Mile House	065	3,269	3,119	1,063	170	145
Osoyoos	100	2,070	1,142	377	58	58
Parksville	014	4,079	1,881	1,023	49	142
Penticton	112	16,406	7,014	3,003	315	764
Point Roberts, U.S.A	512	1,688	1,110	168	36	138
Port Alberni	008	10,075	5,183	2,977	107	494
Powell River	175	6,605	3,428	1,987	95	392
Prince George	067	27,367	18,251	6,693	1,186	1,166
Prince Rupert	069	5,063	2,246	736	100	162
Princeton	114	1,654	1,275	507	62	145
Qualicum	015	2,897	1,351	692	29	88
Queen Charlotte	520	1,091	1,162	290	23	95
Quesnel	071	6,439	5,387	1,850	310	404
Revelstoke	116	3,281	2,300	873	160	226
Richmond	102	81,037	15,660	7,329	591	2,424
Riondel	147	130	89	40	—	1
Salmo	148	847	603	178	34	74
Salmon Arm	118	6,894	4,353	1,828	320	302
Salt Spring Island	513	1,433	847	252	15	86
Sechelt	173	6,294	3,254	1,148	59	338
Sidney	025	9,083	2,496	1,336	42	332
Slocan	115	653	507	132	17	33
Smithers	073	2,954	2,590	835	136	139
Sooke	026	2,996	1,514	565	56	143
Squamish	177	3,695	1,852	554	99	217
Surrey	029	62,745	19,782	8,091	932	2,209
Terrace	075	5,486	4,249	1,289	175	346
Tofino	180	353	211	71	3	23
Trail	152	9,723	3,997	2,017	195	577
Ucluelet	179	608	392	167	27	46
Vancouver	002	188,366	36,850	7,729	4,677	5,041
Vanderhoof	007	2,723	2,769	847	184	138
Valemount	163	556	611	151	43	36
Vavenby	165	1,328	1,222	443	92	81
Vernon	121	17,878	9,854	3,570	570	831
Victoria	001	98,862	30,073	12,557	769	3,449
Wells	079	124	129	32	3	15
Williams Lake	081	6,626	6,416	1,774	417	346
Out/Province	529	347	1,161	75	1,548	14
Miscellaneous	999	—	—	—	—	—
Total Licensed Vehicles		1,145,369	427,179	163,381	29,451	44,449

The difference between total licensed vehicles and total registered vehicles is due to the licence with owner concept, e.g., vehicles on dealers' sales lots are not required to be licensed. Some vehicles have been destroyed or removed from the Province but remain registered for six years or until notice is received.

Summary of Revenue Collected Under the Motor Vehicle Act, Commercial Transport Act, All Terrain Vehicle Act, *For the Period of January 1/81 to December 31/81*

Motor Vehicle Act—*Revenue Source*

VEHICLE		
Licence Fees:	$	$
Passenger	37,285,593.00	
Motorcycles	507,940.00	
Utility Trailers	1,915,808.00	
Demonstration—Vehicles	345,793.00	
Demonstration—Motorcycles	5,862.00	
Transporter	24,768.00	
Manufacturer	5,135.00	
Repairman	78,346.00	
Vintage	6,577.00	
Dealers Interim	37,420.00	
Personalized	365,355.00	
Sub Total	40,578,597.00	
General Fees		
Notice of Transfer of Ownership	617,135.00	
Duplicate Certificates	87,599.00	
New Vehicle Registration	157,800.00	
Decal Replacement	11,581.00	
Plate Substitution	54,842.00	
Search of Vehicle Records	261,226.49	
Vehicle Inspection	1,585,285.00	
Sub Total	2,775,468.49	
Permit Fees		
Temporary Operation	123,451.00	
Temporary Testing and Demonstration	80,709.00	
Sub Total	204,160.00	
Other		
Miscellaneous	13.00	
Exchange Account	3,111.20	
Sub Total	3,124.20	
Total Vehicle Revenue		43,561,349.69

Motor Vehicle Act—*Revenue Source*

	$	$
DRIVERS		
Licence Fees		
Originals	4,028,360.00	
Duplicates	299,541.00	
Industrial Air Certificate	635.00	
Driving School Licences	5,355.00	
Sub Total	4,333,891.00	
General Fees		
Identification Cards	43,680.00	
Air Brake Manuals	20,411.00	
Driver Examination Medical Appeals	400.00	
Driver Examination Fee	1,012,874.00	
Driver Licence Assessment	1,009,392.86	
Driver Record Search	14,258.89	
Sub Total	2,101,016.75	
Other		
Driver Licence Overpayments	325.42	
Sub Total	325.42	
Total Driver Licence Revenue		6,435,233.17
Total *Motor Vehicle Act*		49,996,582.86

Commercial Transport Act—*Revenue Source*

Licence Fees	$	$
Commercial	43,464,412.00	
Trailers	345,266.00	
Trailer Floater	215,239.00	
Prorate & Reciprocity	970,508.50	
Special Agreement Licences	56,563.00	
Sub Total	45,051,988.50	
General Fees		
New Vehicle Registration	270,155.00	
Decal Replacement	4,894.00	
Plate Substitution	24,346.00	
Sub Total	299,395.00	
Permit Fees		
Temporary Operation	211,780.81	
Temporary Testing & Demonstration	25,608.00	
Non Resident Commercial	1,657,432.25	
Oversize/Overweight and Highway Crossing	2,059,577.16	
Sub Total	3,954,398.22	
Total *Commercial Transport Act*		49,305,781.72

All Terrain Vehicle Act—*Revenue Source*

Licence Fees	$	$
Registration Fee	8,470.00	
Sub Total	8,470.00	
General Fees		
Decal Substitution	134.00	
Transfer of Ownership	1,858.00	
Duplicate Certificate	214.00	
Sub Total	2,206.00	
Total *All Terrain Vehicle Act*		10,676.00

Summary of Revenues Collected

Motor Vehicle Act	49,996,582.86	
Commercial Transport Act	49,305,781.72	
All Terrain Vehicle Act	10,676.00	
Sub Total	99,313,040.58	
Total		99,313,040.58

Other revenues collected by the Motor Vehicle Department in conjunction with the licensing programs on behalf of the Ministry of Finance and the Insurance Corporation of British Columbia

Ministry of Finance		
Social Service Tax Act	1,350,784.15	
Motive Fuel Use Tax Act	545,176.48	
Sub Total	1,895,960.63	
Insurance Corporation of British Columbia	2,476,740.32	
Sub Total	2,476,740.32	
Total Other Revenues		4,372,700.95
Total Revenue Collected		103,685,741.53

Revenue Source
1981

	$
Revenue collected and reported directly to the Motor Vehicle Department	18,938,991.53
Licence Revenue Accounted for through the Vehicle Licence and Insurance Program by the Insurance Corporation on behalf of the Motor Vehicle Department	84,746,750.00
Total	103,685,741.53

Social Service Tax is collected on the sale of vehicles. During 1981 the amount of $28,220,777.38 was collected through the Insurance Corporation of British Columbia and accounted directly to the Ministry of Finance.

Detailed Revenue by Transaction

		Document Count	Revenue $
Drivers Licences			
Original		106,816	
Renewals		344,929	
Duplicate D.L.		111,892	
Identification Cards		15,529	
Overpayments		61	
	TOTAL	579,227	4,371,845.05
Temporary Operation Permits			
Passenger		63,423	
Commercial		59,724	
	TOTAL	123,147	335,231.81
Temporary Testing and Demonstration Permits			
Passenger		40,375	
Commercial		12,808	
	TOTAL	53,183	106,317.00
Non-resident Commercial Vehicle Permits			
Single Trip		54,110	
Quarterly		7,072	
	TOTAL	61,182	1,657,432.25
Demonstration Licence—Motor Vehicles			
New		1,221	
Renewal		6,846	
Replacement—Plate		1,565	
—Decal		1,430	
	TOTAL	11,062	345,793.00
Demonstration Licence—Motorcycles			
New		60	
Renewal		144	
Replacement—Plate		57	
—Decal		45	
	TOTAL	306	5,862.00
Transporters' Licences			
Initial —New		24	
—Renewal		69	
Additional —New		135	
—Renewal		289	
Replacement—Plate		52	
—Decal		41	
	TOTAL	610	24,768.00

Detailed Revenue by Transaction—Continued

		Document Count	Revenue $
Manufacturers' Licences			
Initial —New		8	
—Renewal		27	
Additional —New		19	
—Renewal		29	
Replacement—Plate		4	
—Decal		10	
	TOTAL	97	5,135.00
Trailer Floater Licences			
New		562	
Renewal		1,162	
Replacement—Plate		725	
—Decal		451	
	TOTAL	2,900	215,239.00
Repairman's Licences			
Initial —New		457	
—Renewal		1,040	
Additional —New		126	
—Renewal		453	
Replacement—Plate		218	
—Decal		203	
	TOTAL	2,497	78,346.00
Certificate Replacements		584	621.00
Air Brake Manuals		20,409	20,411.00
Industrial Air Certificates		127	635.00
Driver Exam Medical Appeal Fees		8	400.00
Driver Exam Receipts		263,052	1,012,874.00
Search Fees			
Vehicles		154,817	
Drivers		52,759	
Lien Searches		6,606	
	TOTAL	214,182	275,485.38
Motor Vehicle Inspection Certificates		620,763	41,585,285.00
Vintage (Antique) Licences			
Vintage Vehicles		314	
Motorcycle Vintage		15	
Duplicate Certificates		9	
Transfers		130	
	TOTAL	468	6,577.00

Detailed Revenue by Transaction—Continued

		Document Count	Revenue $
Driving School Licence		569	5,416.37
Dealer's Interim Licence Insurance Certificate		18,710	37,420.00
Driver Licence Assessment Fees			
$ 25.00		33,340	
50.00		2,344	
75.00		409	
100.00		139	
125.00		57	
150.00		18	
175.00		4	
200.00		4	
Sundry		96	
	TOTAL	36,411	1,009,392.86
Personalized Number Plates			
Original		4,829	
Replacements		212	
	TOTAL	5,041	365,355.00
OW/OS—Hwy. Crossing Permits		45,253	2,059,577.16
Commercial Transport Act Special Licences		89	56,563.00
PRORATE/CANADIAN AGREEMENT			
Unform Prorate Agreement		16,739	
UPA Backing Plates		273	
Western Compact		10	
Canadian Reciprocity		138	
CAVR Administration		10,239	
CAVR Back Plates		2,076	
	TOTAL	29,475	970,508.50
New Vehicle Information Statement		68	
Foreign Exchange Surplus		119	3,111.20
Miscellaneous		2	13.00
TOTAL GROSS REVENUE COLLECTED BY THE MOTOR VEHICLE DEPARTMENT UNDER THE *MOTOR VEHICLE ACT* AND THE *COMMERCIAL TRANSPORT ACT*			14,555,614.58

REFUNDS

Legislation provides for the refunding of license fees where licence plates are surrendered to the Superintendent. A person who was allocated motor vehicle licence plates for use on a vehicle registered in his name can, upon disposal of the vehicle, retain, destroy or attach the number plates to a substitute vehicle, or surrender them to the Superintendent, together with an application for refund of fees.

Refunds for motor vehicle licence plates are granted on the basis of the unexpired portion of the licence-year, but no refund is made of an amount less than $5.00.

On reassignment of the motor vehicle plates to a substitute vehicle, no refund is granted if the combined licence and insurance fee is less than $5.00.

The following summary sets out the amount of money refunded for the 1981 calendar year.

1981 Refund Statistics—January 1/81–December 31/81

Type of Refund	Number	Amount
General Refunds		
Motor Vehicle Act		$
Passenger	155	1,748.89
Drivers	527	2,800.00
ICBC	20	111,188.00
Search Fees	731	6,223.17
Personalized Number-plates	398	33,690.00
Driver's Licence Assessment Fee	146	3,325.50
Dealer Plates	285	5,869.00
Department of Commercial Transport		
Commercial	160	13,379.77
ICBC	12	103,392.00
Supplementary Fees	—	—
Trailer Floater and Transporter	31	1,883.00
	2,465	283,499.33
Relinquishment Refunds		
Motor Vehicle Act		
Passenger	17	1,663,390.00
ICBC Drivers	484	1,939.00
Department of Commercial Transport		
Commercial	17	1,339,410.00
ICBC		
	518	3,288,238.33
All Terrain Vehicle Refunds		
All Terrain Vehicle	8	36.00
	4	36.00
	2,991	3,288,274.33

DRIVERS LICENCE DIVISION

The Drivers Licence Division is responsible for the examination of an applicant's ability to safely operate a motor vehicle; for the issuance of drivers' licences, for development of driver safety and improvement programs; and for compiling and recording of incident reports.

There are 103 driver examiners throughout the Province who maintain and operate 20 travelling driver examination units serving the drivers' licensing needs in all areas of British Columbia. The issuance of drivers' licences is done through Motor Licence offices, Government Agencies, and Motor Licence sub-offices as appointed.

Original driver licences issued during the calendar year totalled 105,677, a decrease of 1,933 or 1.8 per cent of 107,610 issued in 1980.

The number of licensed drivers in British Columbia as of December 31, 1981 was 2,044,721, an increase of 94,385 over the previous year.

There were 1,170,963 male drivers and 873,758 female drivers.

CONVICTIONS

The receipt of notices of convictions for driving infractions under the *Criminal Code* (Canada), *Motor Vehicle Act*, Motor Vehicle Act Regulations, and the reports of violations of any law known as a "Traffic Rule", continue to supply information for the inclusion in the individual driving records of each licensed driver in this Province. Access to these records is available by means of the driver's licence number or by the name of the driver. It is the responsibility of the Driver Safety and Improvement Section to retain these records and to utilize the information in their assessment of driver records.

Convictions Under Criminal Code *(Canada) 1978–1981 for Licensed B.C. Drivers*

Offences	1978	1979	1980	1981
Under *Criminal Code* (Canada)				
Causing death by criminal negligence, sec. 203	9	13	7	8
Causing injury by criminal negligence, sec. 204	2	0	1	4
Criminal negligence in operation of motor vehicle, sec. 233 (1)	38	43	25	39
Failing to stop after accident, sec. 233 (2)	513	583	614	649
Dangerous driving, sec. 233 (4)	458	467	538	698
Driving while ability impaired, sec. 234	5,831	6,753	6,853	7,342
Breath sample not provided, sec. 235	1,080	1,440	1,736	1,997
Driving with more than 80 mg of alcohol in blood, sec. 236	9,290	7,794	8,464	10,193
Driving motor vehicle while driver's licence under suspension, sec. 238 (Legislation declared ultra vires on February 4, 1981)	2,650	2,536	2,291	261
	19,871	19,629	20,529	21,191

Total Number of Offences Under Motor Vehicle Act *as Recorded on Licensed B.C. Drivers Records 1978–1981*

Offences	1978	1979	1980	1981
Under *Motor Vehicle Act*—				
Driving without obtaining driver's licence, sec. 23 (1)	3,177	3,297	4,441	6,332
Driving without subsisting Motor Vehicle Liability Policy, sec. 23 (3)	2,250	2,131	2,646	5,663
Driving motor vehicle otherwise than as restricted on driver's licence, sec. 24 (7)	1,199	1,150	1,262	1,655
Driving without having a driver's licence and liability card in possession at time, sec. 30 (1)	6,067	11,055	15,051	19,679
Driving when right to obtain licence is suspended, sec. 31 (3)	—	4	1	10
Leaving the scene of an accident, sec. 62	1,078	1,216	1,181	1,236
Using licence belonging to another, refusing to show licence, sec. 64	396	391	548	1,471
Driving while under a mandatory suspension, sec. 88, 92 (9), 94	—	34	70	467
Failing to obey emergency instructions of a peace officer, sec. 119	97	79	51	62
Failing to obey traffic control signal legend, secs. 130, 132, 133, 134, 136, 139, 163	45,391	45,551	50,793	55,911
Failing to obey special signs "*re*" highway construction, secs. 145, 146, 148	1,604	769	2,084	703
Careless driving, sec. 149	14,329	—	—	—
Driving without due care and attention, sec. 149 (a)	—	8,766	9,243	9,787
Driving without reasonable consideration for others, sec. 149 (b)	—	2,320	2,552	2,878
Driving too fast for road or weather conditions, sec. 149 (c)	—	3,768	4,129	4,316
Slow driving, sec. 150	119	100	253	150
Exceed maximum speed limit, sec. 151	245,911	254,101	270,095	281,850
Exceeding speed limit passing schools and playgrounds, sec. 152	12,514	13,985	19,183	18,017
Passing stopped school bus, sec. 153	237	252	350	344
Failure to drive on the right, sec. 154	1,591	1,527	1,702	1,735
Infractions of "lane" driving, secs. 155, 156, 157	7,161	7,171	7,674	8,732
Infractions of "passing", secs. 159, 160, 161, 162, 165	7,139	8,118	8,845	3,791
*Following too closely, sec. 164	—	—	—	4,753
Infractions of turning, starting, and directional signals, secs. 166, 167, 168, 169, 170, 171, 172, 173, 174	4,754	4,919	5,451	5,638
Failure to yield right of way, secs. 175, 176, 177, 178, 179	6,433	6,887	7,418	7,639
Not exercising due care *re* pedestrians, secs. 181, 183	1,793	2,400	2,163	2,400
Failure to stop at railroad crossing, sec. 186	444	414	329	408
Failure to stop at intersection, sec. 187	14,222	16,967	19,441	19,176
Leaving vehicle improperly parked, sec. 192	833	640	18	19
Backing vehicle illegally, sec. 194	2,444	2,791	2,961	2,739
Operating motorcycle with more than one person, sec. 195	13	14	13	10
Requirements of safe driving on highway, secs. 196, 197	70	95	80	75
Coasting down grade with gears in neutral, sec. 198	9	2	5	5
Fire vehicle safety, secs. 199, 200	26	23	38	30
Driving on sidewalk, sec. 201	180	181	204	217
Opening door requirements, sec. 204	51	52	60	42
Illegal depositing of articles on highway, sec. 205	194	240	171	192
Failure to wear seat-belt assembly, sec. 217	1,084	3,779	12,063	18,210
Riding motorcycle without safety helmet, sec. 218	399	620	613	809
Other	1	—	—	—
	383,210	405,809	453,182	487,151
Under Motor Vehicle Act Regulations	18,418	17,690	10,346	4,417

* Sec. 164 was included with secs. 159, 160, 161, 162 and 165 for the years 1978–80

** Under Motor Vehicle Act Regulation Division R7A.01 for 1981 only

Violations Under Sec. 126A of Motor Vehicle Act, *1978–1981 for Licensed B.C. Drivers*

Offences	1978	1979	1980	1981
Under *Motor Vehicle Act*—				
Failing to obey emergency instructions of a peace officer, sec. 119	87	70	43	46
Failing to obey traffic control signal legend, secs. 130, 132, 133, 134, 136, 139, 163	43,934	44,074	48,673	52,264
Failing to obey special signal signs *re* highway construction, secs. 145, 146, 148	1,566	759	2,021	661
Careless driving, sec. 149	13,034	—	—	—
Driving without due care and attention, sec. 149 (a)	—	8,397	8,761	9,081
Driving without reasonable consideration for others, sec. 149 (b)	—	2,223	2,422	2,709
Driving too fast for road or weather conditions, sec. 149 (c)	—	3,623	3,984	4,070
Slow driving, sec. 150	119	100	242	142
Exceeding maximum speed limit, sec. 151	238,043	248,035	260,423	265,191
Exceeding speed limit passing schools and playgrounds, sec. 152	12,077	13,720	18,586	16,968
Passing stopped school bus, sec. 153	209	235	332	314
Failure to drive on right, sec. 154	1,493	1,478	1,619	1,587
Infractions of "lane" driving, secs. 155, 156, 157	6,887	6,906	7,333	8,136
Infractions of "passing", secs. 159, 160, 161, 162, 165	6,820	7,889	8,592	3,504
Following too closely, sec. 164*	—	—	—	4,496
Infractions of turning, starting and directional signals, secs. 166, 167, 168, 169, 170, 171, 172, 173, 174	4,523	4,746	5,229	5,238
Failure to yield right of way, secs. 175, 176, 177, 178, 179	6,146	6,730	7,179	7,243
Not exercising due care *re* pedestrians, secs. 181, 183	1,717	2,319	2,064	2,246
Failure to stop at railroad crossing, sec. 186	432	399	316	382
Failure to stop at intersection, sec. 187	13,509	16,427	18,577	17,866
Backing vehicle illegally, sec. 194	2,327	2,714	2,841	2,594
Operating a motorcycle with more than one person, sec. 195	6	3	9	7
Improper control and operation of vehicle in canyon or defile, sec. 197	—	1	11	3
Coasting down grade with gears in neutral, sec. 198	8	1	5	5
Failure to observe fire vehicle safety, secs. 199, 200	21	21	35	22
Driving on sidewalk, sec. 201	165	169	171	188
Opening door when unsafe, sec. 204	43	46	51	35
Other	1	—	—	—
	353,167	371,085	399,519	404,998
Under Motor Vehicle Act Regulations	4,613	4,300	4,102	3,906

* Sec. 164 was included with sec. 159, 160, 161, 162 and 165 for the years 1978–1980.

Convictions Under Motor Vehicle Act *1978–1981 for Licensed B.C. Drivers*

Offences	1978	1979	1980	1981
Under *Motor Vehicle Act*				
Driving without obtaining driver's licence, sec. 23 (1)	3,144	3,292	4,422	6,303
Driving without subsisting Motor Vehicle Liability Policy, sec. 23 (3)	2,203	2,122	2,634	5,641
Driving motor vehicle otherwise than as restricted on driver's licence, sec. 24 (7)	1,159	1,138	1,254	1,650
Driving without having driver's licence and liability card in possession at time, sec. 30 (1)	5,998	11,024	14,992	19,594
Driving when right to obtain licence is suspended, sec. 31 (3)		4		10
Leaving the scene of an accident, sec. 62	1,069	1,211	1,170	1,220
Using licence belonging to another, refusing to show licence, sec. 64	383	388	540	1,461
Driving while under a mandatory suspension, sec. 88, 92 (9), 94		34	70	465
Failing to obey emergency instructions of a peace officer, sec. 119	9	9	7	16
Failing to obey traffic control signal legend, secs. 130, 132, 133, 134, 136, 139, 163	731	1,172	1,774	3,289
Failing to obey special signs *re* highway construction, sec. 145, 146, 148	14	10	48	39
Careless driving, sec. 149	155			—
Driving without due care and attention, sec. 149 (a)		163	266	473
Driving without reasonable consideration for others, sec. 149 (b)		34	65	115
Driving too fast for road or weather conditions, sec. 149 (c)		28	54	160
Slow driving, sec. 150			6	7
Exceeding maximum speed limit, sec. 151	2,454	3,881	7,666	14,392
Exceeding speed limit passing schools and playgrounds, sec. 152	107	171	461	888
Passing stopped school bus, sec. 153	16	14	12	22
Failure to drive on the right, sec. 154	15	27	68	115
Infractions of "lane" driving, secs. 155, 156, 157	118	192	284	537
Infractions of "passing", secs. 159, 160, 161, 162, 165	81	124	219	259
Following too closely, sec. 164*			—	204
Infractions of turning, starting and directional signals, secs. 166, 167, 168, 169, 170, 171, 172, 173, 174	84	136	186	351
Failure to yield right of way, secs. 175, 176, 177, 178, 179	39	89	153	293
Not exercising due care *re* pedestrians, secs. 181, 183	48	70	87	132
Failure to stop at railroad crossing, sec. 186	8	12	9	23
Failure to stop at intersection, sec. 187	185	338	683	1,089
Leaving vehicle improperly parked, sec. 192	826	639	18	19
Backing vehicle illegally, sec. 194	20	41	88	112
Operating motorcycle with more than one person, sec. 195	3	9	4	3
Failure to comply with requirements before moving vehicle, sec. 196	68	93	66	69
Improper control and operation of vehicle in canyon or defile, sec. 197		—	1	—
Coasting down grade with gears in neutral, sec. 198		1	—	—
Failure to observe fire vehicle safety, secs. 199, 200	3	2	3	8
Driving on sidewalk, sec. 201	6	11	31	28
Opening door requirements, sec. 204	8	6	8	7
Illegal depositing of articles on highway, sec. 205	188	240	169	192
Failure to wear seat-belt assembly, sec. 217	1,071	3,765	12,007	18,135
Riding motorcycle without safety helmet, sec. 218	386	618	611	804
Other		—	—	—
	20,599	31,108	50,136	78,125
Under Motor Vehicle Act Regulations	13,167	13,130	6,103	395

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* Sec. 164 was included with sec. 159, 160, 161, 162 and 165 for the years 1978–80.

Offences Committed by Juveniles 1978–1981 Licensed to Drive in B.C.

Offences	1978	1979	1980	1981
Under *Motor Vehicle Act*				
Driving without obtaining driver's licence, sec. 23 (1)				
Driving without subsisting Motor Vehicle Liability Policy, sec. 23 (3)	33	5	19	29
Driving motor vehicle otherwise than as restricted on driver's licence, sec. 24 (7)	47	9	12	22
Driving without having driver's licence and liability card in possession at time, sec. 30 (1)	40	12	8	8
Driving while right to obtain licence is suspended, sec. 31 (3)	69	31	59	85
Leaving the scene of an accident, sec. 62			1	
Using licence belonging to another; refusing to show licence, sec. 64	9	5	11	16
Driving while under suspension, secs. 88, 92 (9), 94	13	3	8	10
Failing to obey emergency instructions of a peace officer, sec. 119				2
Failing to obey traffic control signal legend, secs. 130, 132, 133, 134, 136, 139, 165	1		1	
Failing to obey special signs re highway construction, secs. 135, 136, 138	726	305	287	358
Careless driving, sec. 149	24		15	3
Driving without due care and attention, sec. 149 (a)	1 140			
Driving without reasonable consideration for others, sec. 149 (b)		206	216	233
Driving too fast for road or weather conditions, sec. 149 (c)		63	65	54
Slow driving, sec. 150		117	91	86
Exceeding maximum speed limits, sec. 151			5	1
Exceeding speed limit passing schools and playgrounds, sec. 152	5 414	2 188	2 006	2 267
Passing stopped school bus, sec. 153	330	94	136	161
Failure to drive on the right, sec. 154	12	3	6	8
Infractions of "lane" driving, secs. 155, 156, 157	78	22	15	33
Infractions of "passing," secs. 159, 160, 161, 162, 163	136	73	57	50
*Following too closely, sec. 164	238	108	93	28
Infractions of turning, starting and directional signals, secs. 166, 167, 168, 169, 170, 171, 172, 173, 174				53
Failure to yield right of way, secs. 175, 176, 177, 178, 179	147	37	36	40
Not exercising due care re pedestrians, secs. 181, 183	248	68	86	103
Failure to stop at railroad crossing, sec. 186	28	11	12	22
Failure to stop at intersection, sec. 187	4	3	4	3
Leaving vehicle improperly parked, sec. 192	528	202	181	221
Backing vehicle illegally, sec. 194	2	1		
Operating motorcycle with more than one person, sec. 195	97	36	52	33
Failure to comply with requirement before moving of vehicle, sec. 196	4	2		
Improper control and operation of vehicle in canyon or defile, sec. 197	7	1	1	3
Coasting down grade with gears in neutral, sec. 198			1	
Failure to observe fire vehicle safety, secs. 199, 200	1			
Driving on sidewalk, sec. 201	3			
Opening door requirement, sec. 203	8	1	3	1
Illegal depositing of articles on highway, sec. 205			1	
Failure to wear seat belt assembly, sec. 217	6		2	
Riding motorcycle without safety helmet, sec. 218	13	14	86	76
Other	13	7	7	6
	9 419	3 616	3 583	4 028
Under Motor Vehicle Act Regulations**	658	700	131	116

* Sec. 164 was included with secs. 159, 160, 161, 162, 163 for the years 1978–1980.

** Under Motor Vehicle Act Regulation Division 8A.01 for 1981 only.

Analysis of Licensed Drivers on File for 1981
Male
Classifications

Age	1	1-6	2	2-6	3	3-4	3-4-6	3-6	4	4-6	5	5-6	6	Unknown	Total
16											11,950	382	82		12,414
17					1			2			18,040	900	85		19,028
18	4	1			131			18	16	1	20,759	1,323	68		22,321
19	143	25	17	3	313	7	6	65	217	31	21,583	1,850	82		24,342
20	382	81	48	10	457	31	4	71	434	58	21,780	2,337	82		25,775
21-25	3,946	1,386	625	225	3,617	388	147	1,044	4,471	983	111,544	16,812	367		145,555
26-30	5,047	2,379	1,438	596	4,780	808	359	1,818	7,278	1,985	110,036	21,984	390		158,898
31-35	6,318	1,612	2,005	522	5,210	900	285	1,205	7,301	1,366	112,411	14,580	185		153,900
36-40	5,896	939	1,742	265	4,360	651	116	525	4,458	504	89,613	5,732	42		114,843
41-45	5,070	502	1,436	165	3,989	451	65	324	2,806	212	72,196	3,030	24		90,270
46-50	4,299	361	1,190	99	3,520	395	41	225	1,921	137	66,792	2,131	14		81,125
51-55	3,135	250	965	88	3,294	283	23	154	1,553	78	64,474	1,613	20		75,930
56-60	1,754	83	806	42	2,408	196	13	89	1,142	44	60,316	1,086	21		68,000
61-65	835	32	547	15	1,508	93	5	36	687	29	51,868	653	18		56,326
66-70	155	8	154	9	436	25	1	5	333	7	49,014	421	10		50,578
71-75	9		16	1	38				42	1	35,169	123	12		35,411
76-80	2		1		7				8		20,964	33	11		21,026
81-85									1		9,544	6	8		9,559
86-90	1								1		3,846	3	2		3,853
91-95									1		1,194				1,195
96 and Over											183				183
Unknown											426	3	2		431
Total	36,996	7,659	10,990	2,040	34,069	4,228	1,065	5,581	32,670	5,436	953,702	75,002	1,525		1,170,963

Analysis of Licensed Drivers on File for 1981
Female
Classifications

Age	1	1-6	2	2-6	3	3-4	3-4-6	3-6	4	4-6	5	5-6	6	Unknown	Total
16											7,280	24	10		7,314
17											13,338	46	12		13,396
18	1				2			1			16,472	65	10		16,551
19	9	1	2		8			3	52	1	18,524	105	11		18,716
20	15		9		14				130	1	19,903	144	13		20,229
21-25	152	14	115	12	120	18		10	1,342	71	117,628	1,430	63		120,975
26-30	134	21	245	13	110	9	4	16	1,784	111	128,377	1,966	66		132,856
31-35	121	13	247	22	67	12	1	6	1,232	70	122,610	1,376	39		125,816
36-40	81	5	207	15	54	12			826	31	89,591	622	8		91,452
41-45	49	5	162	9	26	6		2	620	8	67,459	288	18		68,652
46-50	26	1	105		31	5		3	398	5	55,866	155	3		56,598
51-55	13	1	56	2	37			1	280	5	52,054	101	7		52,557
56-60	8		56		13	3			171	1	49,794	53	6		50,105
61-65	1		12		3				76		39,496	24	2		39,614
66-70			1						16		29,987	11			30,015
71-75			1						2		16,883	6	2		16,894
76-80											7,635	1	2		7,638
81-85									1		3,108	2			3,111
86-90											942				942
91-95											166	1			167
96 and Over											18				18
Unknown											142				142
Total	610	61	1,218	73	485	65	5	42	6,930	304	857,273	6,420	272		873,758

Analysis of Licensed Drivers on File for 1981
All
Classifications

Age	1	1-6	2	2-6	3	3-4	3-4-6	3-6	4	4-6	5	5-6	6	Unknown	Total
16											19,230	406	92		19,728
17					1			2			31,378	946	97		32,424
18	5	1			133			19	16	1	37,231	1,388	78		38,872
19	152	26	19	3	321	7	6	68	209	32	40,107	1,955	93		43,058
20	307	81	57	10	471	31	4	71	564	59	41,683	2,481	95		46,004
21-25	4,098	1,400	740	237	3,737	406	147	1,054	5,813	1,054	229,172	18,242	430		266,530
26-30	5,181	2,400	1,683	609	4,890	817	363	1,834	9,062	2,096	238,413	23,950	456		291,754
31-35	6,439	1,625	2,252	544	5,277	912	286	1,211	8,533	1,436	235,021	15,956	224		279,716
36-40	5,977	944	1,949	280	4,413	663	116	525	5,284	535	179,204	6,354	50		206,295
41-45	5,119	507	1,598	174	4,015	457	65	326	3,426	220	139,655	3,318	42		158,922
46-50	4,325	362	1,295	99	3,551	400	41	228	2,319	142	122,658	2,286	17		137,723
51-55	3,148	251	1,021	90	3,331	283	23	155	1,833	83	116,528	1,714	27		128,487
56-60	1,762	83	862	42	2,421	199	13	89	1,313	45	110,110	1,139	27		118,105
61-65	836	32	559	15	1,511	93	5	36	763	29	91,364	677	20		95,940
66-70	155	8	155	9	436	25	1	5	349	7	79,001	432	10		80,593
71-75	9		17	1	38				44	1	52,052	129	14		52,305
76-80	2		1		7				8		28,599	34	13		28,664
81-85									2		12,652	8	8		12,670
86-90	1								1		4,788	3	2		4,795
91-95									1		1,360	1			1,362
96 and Over											201				201
Unknown											568	3	2		573
Total	37,606	7,720	12,208	2,113	34,554	4,293	1,070	5,623	39,600	5,740	1,810,975	81,422	1,797		2,044,721

*Motor Vehicle Traffic Incident Frequencies**—1971–1981*

Year	Motor Vehicles Licensed	Number of Incidents	Incidents Per 1,000 Vehicles Licensed	Injuries	Deaths	Deaths Per 10,000 Vehicles Licensed	Deaths Per 100 Million Km	Fatal Incidents	Fatal Incidents Per 100 Million Km
1971	1,087,992	59,745	54.91	22,340	636	5.8	4.04	538	3.83
1972	1,164,749	59,996	51.51	23,416	716	6.1	4.28	602	3.59
1973	1,248,422	69,564	56.00	27,709	825	6.7	4.46	698	3.77
1974	1,333,891	84,445	63.30	28,609	844	6.3	4.23	718	3.60
1975	1,349,382	85,601	63.44	25,003	717	5.3	3.53	593	2.92
1976	1,411,380	84,158	59.65	25,239	630	4.5	3.01	541	2.59
1977	1,556,262	115,046	73.92	31,942	718	4.6	3.20	617	2.76
1978	1,651,274	112,635	68.21	33,105	640	3.9	2.69	553	2.32
1979	1,800,486	123,863	68.79	37,809	738	4.1	2.92	628	2.49
1980	1,880,382	143,577	76.35	41,500	811	4.3	3.02	710	2.64
1981	1,809,829	127,831*	70.63	44,123	859	4.7	3.24	761	2.87

In 1981 there were 761 fatal incidents in which 859 victims were killed. Also, during this year 44,123 victims were injured in 30,626 personal injury incidents.

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* The number of incidents in 1981 cannot be compared to previous years because the reporting level for property damage only incidents was raised January 1, 1981 from $200.00 to $400.00. This significantly reduced the number of incidents reported during 1981.

** Reportable incidents are those where the aggregate property damage exceeds $400.00 or a person is injured or killed. During 1977 a new Traffic Incident Reporting System was introduced and as a result, a higher number of incidents were reported. Prior to 1977 incident data was obtained from driver completed forms. The new system now obtains data from forms completed by the police. Due to the significant change in the way reports were submitted, a comparison between data previous to 1977 and data collected after January 1, 1977 should not be attempted.

Incidents and Victims by Month During 1981

Month	Fatal Incidents	Victims Killed	Personal Injury Incidents	Victims Injured	Property Damage Incidents	Number of Vehicles	Pedestrians Killed	Total Number of Incidents
January	39	44	2,058	2,937	6,178	14,809	9	8,275
February	49	57	2,175	3,055	6,537	15,888	12	8,761
March	63	68	2,387	3,484	6,361	16,018	15	8,811
April	58	70	2,383	3,431	7,056	17,330	13	9,497
May	84	94	2,767	4,034	7,542	18,755	14	10,393
June	60	73	2,899	4,219	8,179	20,367	6	11,138
July	67	76	2,891	4,281	8,212	20,160	4	11,170
August	103	111	2,796	4,097	8,829	21,386	10	11,728
September	79	91	2,475	3,547	8,251	19,701	17	10,805
October	56	66	2,628	3,703	9,271	21,865	7	11,955
November	56	57	2,518	3,512	9,143	21,145	18	11,717
December	47	52	2,649	3,823	10,885	24,455	10	13,581
Totals	761	859	30,626	44,123	96,444	231,879	135	127,831

Motor Vehicle Incident Fatal and Injury Victims by Age—1981

	Fatal Victims				Injury Victims			
Age	Male	Female	Unknown	Total	Male	Female	Unknown	Total
Unknown	22	3	1	26	1,401	921	91	2,413
1	5	2	—	7	64	68	1	133
2	1	4	—	5	87	77	—	164
3	4	4	—	8	90	56	1	147
4	1	1	—	2	113	90	—	203
5	1	4	—	5	118	119	1	238
6–10	7	5	—	12	625	474	4	1,103
11–15	16	12	—	28	993	956	1	1,950
16	25	9	—	34	1,051	741	1	1,793
17	24	9	—	33	1,375	911	2	2,288
18	34	7	—	41	1,562	809	1	2,372
19	39	13		52	1,681	843		2,524
20	32	9		41	1,582	757		2,339
21–25	104	31		135	5,047	2,775		7,822
26–30	65	25		90	2,984	1,864	2	4,850
31–35	41	14		55	1,999	1,400	2	3,401
36–40	36	11		47	1,235	1,054	2	2,291
41–45	31	12		43	908	795	1	1,704
46–50	23	7		30	773	670		1,443
51–55	13	14		27	616	627	2	1,245
56–60	24	11		35	546	563		1,109
61–65	14	11		25	438	507		945
66–70	16	14		30	337	345		682
71–75	12	8		20	232	242		474
76–80	7	7		14	142	138		280
81–85	2	5		7	63	68		131
86–90	4			4	31	19		50
91–95	1	1		2	7	5		12
96 and Over	1			1	5	11	1	17
Totals	605	253	1	859	26,105	17,905	113	44,123

Type of Safety Equipment Used by Drivers and Passengers in Incidents—1981

Safety Equipment	Drivers							Passengers						
	Property Damage		Injury Incidents		Fatal Incidents		Total Drivers	Property Damage		Injury Incidents		Fatal Incidents		Total Passengers
	Number of Drivers	Per Cent of Total Drivers	Number of Drivers	Per Cent of Total Drivers	Number of Drivers	Per Cent of Total Drivers		Number of Passengers	Per Cent of Total Passengers	Number of Passengers	Per Cent of Total Passengers	Number of Passengers	Per Cent of Total Passengers	
Unknown	7,447	5.5	4,305	3.2	155	.1	11,907	2,586	3.9	2,223	3.4	85	.1	4,894
None in vehicle	2,827	2.1	2,801	2.1	84	.1	5,712	1,845	2.8	1,851	2.8	62	.1	3,758
Not used	14,457	10.8	10,004	7.4	476	.4	24,937	9,944	15.0	10,048	15.1	572	.9	20,564
Lap belt only	19,806	14.7	8,229	6.1	104	.1	28,139	10,091	15.2	5,238	7.9	65	.1	15,394
Harness only	2,117	1.6	822	.6	5		2,944	596	.9	333	.5	6	—	935
Harness and lap	42,925	32.0	16,658	12.4	186	.1	59,769	13,270	20.0	6,541	9.8	89	.1	19,900
Air bag	13		14				27	13	—	15	—	—	—	28
Child restraint	14		7				21	573	.9	260	.4	4	—	837
Helmet	113	.1	590	.4	31		734	10	—	112	.2	10	—	132
Totals	89,719	66.8	43,530	32.4	1,041	.8	134,290	38,928	58.6	26,621	40.1	893	1.3	66,442

Number of Vehicles Involved in Incidents by Vehicle Type During 1981

Vehicle Type	Property Damage Incidents	Per Cent of Total Vehicle Type	Injury Incidents	Per Cent of Total Vehicle Type	Fatal Incidents	Per Cent of Total Vehicle Type	Total Vehicles
Passenger car	128,265	76.9	37,865	22.7	658	.4	166,788
Car and trailer	726	78.2	197	21.3	5	.5	928
Single unit truck, light	27,678	77.6	7,770	21.8	211	.6	35,659
Single unit truck, heavy*	2,948	80.1	701	19.0	34	.9	3,683
Light truck trailer	525	80.2	126	19.2	4	.6	655
Heavy truck trailer*	666	77.3	188	21.8	8	.9	862
Tractor trailer*	1,600	73.8	515	23.7	58	2.7	2,173
Tractor trailer and pup*	246	68.1	101	28.0	14	3.9	361
School bus	130	76.5	40	23.5			170
Public bus	575	75.8	174	22.9	10	1.3	759
Motorcycle	690	22.5	2,304	75.0	76	2.5	3,070
Moped	3	8.3	33	91.7			36
Bicycle	125	9.7	1,150	88.7	21	1.6	1,296
Camper	2,412	77.6	679	21.8	19	.6	3,110
Camper trailer	202	84.5	37	15.5			239
Motor home	457	77.3	127	21.5	7	1.2	591
Motor home trailer	154	81.5	32	16.9	3	1.6	189
Trailer only	123	82.6	25	16.8	1	.7	149
All terrain vehicles							
Snowmobiles	9	37.5	14	58.3	1	4.2	24
Four-wheel drive	403	73.9	138	25.3	4	.7	545
All terrain vehicles, other	7	36.8	12	63.2			19
Farm vehicles	33	61.1	18	33.3	3	5.6	54
Road construction vehicles	46	88.5	5	9.6	1	1.9	52
Special vehicles	97	77.6	27	21.6	1	.8	125
Vehicles unidentified	9,914	95.8	421	4.1	7	.1	10,342
Totals	178,034	76.8	52,699	22.7	1,146	.5	231,879

* These vehicles are defined as weighing 10 000 kg or over

Number of Vehicles Involved in Incidents by Month—1981

Month	Property Damage Only	Injury	Fatal	Total
January	11,268	3,478	63	14,809
February	12,049	3,765	74	15,888
March	11,802	4,124	92	16,018
April	13,133	4,114	83	17,330
May	13,860	4,768	127	18,755
June	15,188	5,087	92	20,367
July	15,142	4,913	105	20,160
August	16,414	4,816	156	21,386
September	15,336	4,257	108	19,701
October	17,258	4,530	77	21,865
November	16,756	4,298	91	21,145
December	19,828	4,549	78	24,455
Totals	178,034	52,699	1,146	231,879

1981 Traffic Incidents by Police Jurisdictions—Kelowna Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Armstrong	229	3	1.3	66	28.8	160	69.9	3	102
Enderby	188			66	35.1	122	64.9		112
Falkland	147	3	2.0	57	38.8	87	59.2	3	94
Kelowna (rural)	1,052	5	.5	302	28.7	745	70.8	5	433
Kelowna (municipal)	2,236	14	.6	526	23.5	1,696	75.8	15	753
Keremeos	161	5	3.1	65	40.4	91	56.5	8	93
Lumby	159	3	1.9	48	30.2	108	67.9	3	70
Oliver	256	4	1.6	65	25.4	187	73.0	5	91
Osoyoos	199	1	.5	46	23.1	152	76.4	1	62
Penticton (rural)	266	3	1.1	98	36.8	165	62.0	3	153
Penticton (municipal)	940	3	.3	258	27.4	679	72.2	3	351
Princeton	482	9	1.9	154	32.0	319	66.2	9	263
Revelstoke	696	16	2.3	145	20.8	535	76.9	20	254
Salmon Arm (rural)	146	2	1.4	56	38.4	88	60.3	3	100
Salmon Arm (municipal)	458	1	.2	121	26.4	336	73.4	1	190
Sicamous	220	4	1.8	62	28.2	154	70.0	4	100
Summerland (rural)	59			13	22.0	46	78.0		19
Summerland (municipal)	140	1	.7	39	27.9	100	71.4	1	63
Vernon (rural)	618	5	.8	180	29.1	433	70.1	6	283
Vernon (municipal)	1,116	4	.4	235	21.1	877	78.6	4	342
Totals	9,770	86	.9	2,604	26.7	7,080	72.5	97	3,928

1981 Traffic Incidents by Police Jurisdictions—Kamloops Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Alexis Creek	81	2	2.5	24	29.6	55	67.9	3	41
Anahim Lake	32	2	6.3	5	15.6	25	78.1	2	10
Ashcroft	278	4	1.4	57	20.5	217	78.1	6	80
Barriere	137	3	2.2	39	28.5	95	69.3	4	62
Blue River	94	1	1.1	33	35.1	60	63.8	1	74
Chase	293	4	1.4	88	30.0	201	68.6	6	145
Clearwater	214	3	1.4	54	25.2	157	73.4	3	98
Clinton	172	4	2.3	51	29.7	117	68.0	5	91
Kamloops (rural)	345	8	2.3	100	29.0	237	68.7	11	160
Kamloops (municipal)	2,795	11	.4	686	24.5	2,098	75.1	12	911
Lillooet	183	3	1.6	53	29.0	127	69.4	3	87
Logan Lake	108	1	.9	29	26.9	78	72.2	1	43
Lytton	128	7	5.5	45	35.2	76	59.4	9	79
Merritt (rural)	180	1	.6	58	32.2	121	67.2	1	92
Merritt (municipal)	147			38	25.9	109	74.1	—	49
100 Mile House	529	7	1.3	141	26.7	381	72.0	7	241
Spences Bridge	104	2	1.9	31	29.8	71	68.3	2	51
Valemount	210	5	2.4	52	24.8	153	72.9	6	85
Williams Lake (rural)	544	10	1.8	164	30.1	370	68.0	16	292
Williams Lake (municipal)	640	6	.9	123	19.2	511	79.8	6	167
Totals	7,214	84	1.2	1,871	25.9	5,259	72.9	104	2,858

1981 Traffic Incidents by Police Jurisdictions—Nelson Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Castlegar (rural)	226	5	2.2	73	32.3	148	65.5	6	112
Castlegar (municipal)	278			50	18.0	228	82.0		71
Cranbrook (rural)	342	7	2.0	102	29.8	233	68.1	8	164
Cranbrook (municipal)	590	2	.3	106	18.0	482	81.7	2	135
Crescent Valley	161	2	1.2	46	28.6	113	70.2	2	77
Creston	448	9	2.0	116	25.9	323	72.1	10	176
Fernie	387	5	1.3	98	25.3	284	73.4	5	147
Field	75	2	2.7	16	21.3	57	76.0	3	34
Fruitvale	138	1	.7	34	24.6	103	74.6	1	43
Golden	471	5	1.1	111	23.6	355	75.4	7	180
Grand Forks	319	3	.9	98	30.7	218	68.3	3	160
Invermere	285	3	1.1	73	25.6	209	73.3	4	119
Kaslo	78	2	2.6	20	25.6	56	71.8	2	30
Kimberley (rural)	132	2	1.5	23	17.4	107	81.1	2	42
Kimberley (municipal)	148	2	1.4	30	20.3	116	78.4	2	45
Midway	115	5	4.3	27	23.5	83	72.2	6	45
Nakusp	160	4	2.5	38	23.8	118	73.8	4	64
Nelson	246	3	1.2	77	31.3	166	67.5	3	112
New Denver	61			15	24.6	46	75.4		23
Radium	172	5	2.9	39	22.7	128	74.4	5	66
Rossland	189	1	.5	32	16.9	156	82.5	1	45
Salmo	162	4	2.5	49	30.2	109	67.3	5	79
Sparwood	429			130	30.3	299	69.7		189
Trail (rural)	132	1	.8	42	31.8	89	67.4	1	60
Trail (municipal)	418	1	.2	60	14.4	357	85.4	1	81
Totals	6,162	74	1.2	1,505	24.4	4,583	74.4	83	2,999

1981 Traffic Incidents by Police Jurisdictions—Prince George Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Burns Lake	243	3	1.2	46	18.9	194	79.8	3	70
Chetwynd	314	7	2.2	67	21.3	240	76.4	7	101
Dawson Creek (rural)	300	1	.3	102	34.0	197	65.7	1	146
Dawson Creek (municipal)	576	1	.2	87	15.1	488	84.7	1	139
Fort Nelson	352	5	1.4	71	20.2	276	78.4	5	114
Fort St. James	145	3	2.1	33	22.8	109	75.2	3	46
Fort St. John (rural)	646	12	1.9	147	22.8	487	75.4	12	229
Fort St. John (municipal)	817	2	.2	94	11.5	721	88.2	2	125
Fraser Lake	136	1	.7	39	28.7	96	70.6	1	67
Hudson Hope	51			12	23.5	39	76.5		16
Mackenzie (rural)	110	2	1.8	31	28.2	77	70.0	2	52
Mackenzie (municipal)	107			21	19.6	86	80.4		34
McBride	116	1	.9	37	31.9	78	67.2	1	64
Prince George (rural)	555	8	1.4	167	30.1	380	68.5	12	282
Prince George (municipal)	2,912	11	.4	591	20.3	2,310	79.3	13	845
Quesnel (rural)	492	12	2.4	181	36.8	299	60.8	13	288
Quesnel (municipal)	374	1	.3	79	21.1	294	78.6	1	106
Vanderhoof	289	5	1.7	95	32.9	189	65.4	8	163
Wells	32			6	18.8	26	81.3		6
Watson Lake	37	2	5.4	12	32.4	23	62.2	2	23
Totals	8,604	77	.9	1,918	22.3	6,609	76.8	87	2,916

1981 Traffic Incidents by Police Jurisdictions—Prince Rupert Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Atlin	23			9	39.1	14	60.9		14
Bella Coola	67			19	28.4	48	71.6		32
Cassiar	73	1	1.4	23	31.5	49	67.1	1	49
Granisle	56			14	25.0	42	75.0		18
Hazelton	177	5	2.8	43	24.3	129	72.9	5	78
Houston	332	9	2.7	73	22.0	250	75.3	10	119
Kitimat (rural)	63			29	46.0	34	54.0		56
Kitimat (municipal)	292	2	0.7	68	23.3	222	76.0	2	111
Masset	112	2	1.8	31	27.7	79	70.5	2	39
New Aiyansh	15	1	6.7	6	40.0	8	53.3	1	10
Ocean Falls	2					2	100.0		
Prince Rupert (rural)	134	2	1.5	46	34.3	86	64.2	2	84
Prince Rupert (municipal)	693	8	1.2	116	16.7	569	82.1	8	161
Queen Charlotte City	97	1	1.0	26	26.8	70	72.2	1	35
Smithers	431	5	1.2	85	19.7	341	79.1	6	158
Stewart	82	6	7.3	21	25.6	55	67.1	7	47
Telegraph Creek	43	1	2.3	11	25.6	31	72.1	1	22
Terrace (rural)	312	4	1.3	116	37.2	192	61.5	6	201
Terrace (municipal)	698	2	0.3	159	22.8	537	76.9	2	136
Bella Bella	1					1	100.0		
Totals	3,703	49	1.3	895	24.2	2,759	74.5	54	1,380

1981 Traffic Incidents by Police Jurisdictions—Lower Mainland District RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Abbotsford (rural)	10			2	20.0	8	80.0		10
Abbotsford (municipal)	611	2	.3	166	27.2	443	72.5	2	257
Agassiz	280	3	1.1	89	31.8	188	67.1	3	138
Burnaby	8,271	23	.3	1,728	20.9	6,520	78.8	24	2,378
Boston Bar	179	9	5.0	45	25.1	125	69.8	11	74
Chilliwack (rural)	166	1	.6	57	34.3	108	65.1	1	89
Chilliwack (municipal)	1,488	3	.2	327	22.0	1,158	77.8	4	452
Chilliwack (township)	76			16	21.1	60	78.9		21
Coquitlam (rural)	141	1	.7	41	29.1	99	70.2	1	41
Coquitlam (municipal)	2,097	4	.2	467	22.3	1,626	77.5	4	648
Maple Ridge (rural)	229	6	2.6	69	30.1	154	67.2	9	100
Maple Ridge (municipal)	1,329	8	.6	362	27.2	962	72.4	8	520
Hope	569	6	1.1	155	27.2	408	71.7	6	251
Gibsons	368	4	1.1	111	30.2	253	68.8	4	155
Langley City	810	2	.2	162	20.0	646	79.8	4	244
Langley Township	1,357	7	.5	430	31.7	920	67.8	9	634
Mission (rural)	145	1	.7	44	30.3	100	69.0	1	62
Mission (municipal)	686	2	.3	204	29.7	480	70.0	2	286
North Vancouver City	1,634	4	.2	344	21.1	1,286	78.7	4	443
North Vancouver District	1,804	2	.1	374	20.7	1,428	79.1	2	492
Pemberton	123	2	1.6	36	29.3	85	69.1	2	67
Port Coquitlam	809	1	.1	195	24.1	613	75.8	1	328
Richmond	4,282	9	.2	992	23.2	3,281	76.6	9	1,360
Sechelt	369	1	.3	92	24.9	276	74.8	3	127
Squamish (rural)	247	5	2.0	91	36.8	151	61.1	10	157
Squamish (municipal)	401	3	.7	132	32.9	266	66.3	3	190
Surrey	7,220	41	.6	2,000	27.7	5,179	71.7	48	2,980
University	329	1	.3	71	22.0	256	77.6	1	87
Vancouver Marine	33			7	21.2	26	78.8		10
White Rock	410	2	.5	86	21.0	322	78.5	2	125
Unit "A" Freeway	537	8	1.5	168	31.3	364	67.8	5	266
Unit "B" Freeway	1,254	10	.8	356	28.4	888	70.8	11	534
Unit "C" Freeway	338	8	2.4	142	42.0	188	55.6	9	232
Whistler	230	2	.9	45	19.6	183	79.6	2	61
Totals	38,874	174	.4	9,660	24.8	29,040	74.7	198	13,804

1981 Traffic Incidents by Police Jurisdictions—Victoria Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Chemainus	249	2	.8	78	31.3	169	67.9	2	103
Colwood	1,182	4	.3	370	31.3	808	68.4	4	517
Duncan	653	2	.3	180	27.6	471	72.1	2	250
North Cowichan	461	5	1.1	145	31.5	311	67.5	5	205
Gabriola Island	33			8	24.2	25	75.8		10
Ganges	165			58	35.2	107	64.8		79
Ladysmith	292	6	2.1	95	32.5	191	65.4	7	159
Lake Cowichan	92	2	2.2	21	22.8	69	75.0	3	26
Nanaimo (rural)	371	6	1.6	108	29.1	257	69.3	6	151
Nanaimo (municipal)	2,558	11	.4	641	25.1	1,906	74.5	11	915
Pender Island	45	1	2.2	17	37.8	27	60.0	1	28
Shawnigan Lake	297	1	.3	99	33.3	197	66.3	1	155
Sidney (rural)	187	1	.5	51	27.3	135	72.2	1	85
Sidney (municipal)	219	1	.5	63	28.8	155	70.8	1	80
Sooke	361	1	.3	123	34.1	237	65.7	1	173
Totals	7,165	43	.6	2,057	28.7	5,065	70.7	45	2,956

1981 Traffic Incidents by Police Jurisdictions—Courtenay Subdivision RCMP

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Alert Bay	47			9	19.1	38	80.9		10
Campbell River (rural)	328	6	1.8	101	30.8	221	67.4	7	187
Campbell River (municipal)	818	2	.2	210	25.7	606	74.1	2	270
Comox	180	1	.6	39	21.7	140	77.8	1	81
Courtenay (rural)	708	13	1.8	195	27.5	500	70.6	18	308
Courtenay (municipal)	561	2	.4	137	24.4	422	75.2	2	193
Gold River	96	1	1.0	25	26.0	70	72.9	1	47
Parksville	824	14	1.7	227	27.5	583	70.8	16	360
Port Alberni (rural)	488	4	.8	150	31.0	332	68.2	4	170
Port Alberni (municipal)	664	2	.3	167	25.2	495	74.5	2	257
Port Alice	85			17	20.0	68	80.0		20
Port Hardy	305	4	1.3	73	23.9	228	74.8	4	106
Port McNeill	175	2	1.1	46	26.3	127	72.6	2	82
Powell River (rural)	134	3	2.2	64	47.8	67	50.0	2	93
Powell River (municipal)	385	3	.8	96	24.9	286	74.3	3	111
Quadra Island	77	1	1.3	18	23.4	58	75.3	1	28
Sayward	71	1	1.4	16	22.5	54	76.1	1	21
Tahsis	81			17	21.0	64	79.0		31
Tofino	67			10	14.9	57	85.1		17
Ucluelet	160	1	.6	58	36.3	101	63.1	1	104
Totals	6,252	60	.9	1,675	26.8	4,517	72.3	66	2,417

1981 Traffic Incidents by Police Jurisdictions—Municipal Forces

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
Vancouver	25,928	57	.2	4,623	17.8	21,248	82.0	62	6,102
Victoria	2,902	12	.4	902	31.4	1,988	68.2	13	1,199
Saanich	2,086	8	.4	680	32.6	1,398	67.0	8	947
Central Saanich	248	3	1.2	70	28.2	175	70.6	3	115
Esquimalt	372	1	.3	117	31.5	254	68.3	1	164
Oak Bay	225			69	30.7	156	69.3		88
Delta	2,060	9	.4	417	20.2	1,634	79.3	9	578
Matsqui	1,524	9	.6	441	28.9	1,074	70.5	11	621
New Westminster	2,815	9	.3	608	21.6	2,198	78.1	9	815
West Vancouver	1,365	6	.4	299	21.9	1,060	77.7	6	461
Nelson	298	1	.3	73	24.5	224	75.2	1	96
Port Moody	516			140	27.1	376	72.9		184
Totals	[illegible]	115	.3	[illegible]	20.9	31,840	78.8	123	11,489

1981 Traffic Incidents by Police Jurisdictions—Other Police Forces

Police Jurisdiction Location	Total Incidents	Fatal Incidents		Injury Incidents		Property Damage		Victims Killed	Victims Injured
		Number	Per Cent of Total Location	Number	Per Cent of Total Location	Number	Per Cent of Total Location		
National Harbours Board	24	2	8.3	4	16.6	18	75.1	2	8
B.C. Highway Patrol	1					1	100.0		
Military Police	45*			10	22.2	35	77.8		14
Totals	70	2	2.9	14	20.0	54	77.1	2	19
Unknown									47

DRIVER IMPROVEMENT PROGRAM

The Driver Safety and Improvement Section of the Driver Licence Division continued the screening of unsatisfactory driving records, which resulted in many suspensions of drivers' licences. Continuing progress is being made in controlling those drivers whose actions become hazardous on the highway as the result of alcohol involvement and other dangerous driving practices.

Summary of Action Taken Under Driver Improvement Program—1981

	Age 16	Age 17 and Over	Total
Driving records reviewed			90,371
Warning letters			60,292
Probations			17,810
Interviews conducted in Victoria			1,180
Driver licence suspensions	73	33,295	33,368
Reasons for suspension:			
Section 82 (Court suspension)			437
Section 82.8 (*Criminal Code* charges involving death)			30
Section 83 (Suspensions by superintendent)			873
Section 87 (Unsatisfied judgement)			43
Section 88 (Unsatisfied driving record)			9,334
Section 92 (Mandatory suspensions)			22,433
Section 94 (Suspension outside of British Columbia)			218
		Total	33,368

Alcohol related offences	21,878
Total of all *Criminal Code* offences received	23,761
Total of all offences recorded	623,347
Juvenile offences reported	4,341

Analysis of Suspensions, Probations and Warning Letters by Age Group for 1981, for All Drivers

Age	Section 82 MVA	Section 87-A MVA	Section 4-11 MVA	Section 47 MVA	Section 88 MVA	Section 87 MVA	Section 96 MVA	Total	Probations	Warning Letters
16	24		4		2	42		73	3	63
17	86		2		107	427	2	824	367	1,557
18	28	1	4		671	833	1	1,560	1,728	4,311
19	24	4	12		1,304	1,283	10	2,642	2,092	4,380
20	26	1	24		1,518	1,404	9	2,978	1,982	4,013
21-25	65	14	118	6	3,844	8,228	58	12,232	8,924	15,628
26-30	50	2	116	14	1,048	3,648	40	4,911	2,836	10,097
31-35	38	3	78	11	477	2,701	54	3,332	1,448	7,376
36-40	24		80	8	296	1,946	18	2,379	779	4,484
41-45	24	1	60	4	163	1,456	16	1,732	436	2,907
46-50	18		28	2	111	1,129	9	1,334	234	1,999
51-55	11	1	44	1	80	887	12	1,036	156	1,268
56-60	6		32	7	61	662	7	769	82	944
61-65	12		37		71	377	6	447	82	801
66-70	8		40		18	208	2	270	17	436
71-75	2		63		6	94		159	7	113
76-80			28			17		67	3	67
81-85			41			7		43	1	19
86-90			18					18	1	17
91-95			1					1		1
96 and over	1		1					2		1
Unknown										
Totals	437	30	873	43	9,444	23,433	218	33,868	17,810	60,292

Driver Training School Statistics Licence-issuing Period of January 1, 1981 to December 31, 1981

Issuances January 1, 1981 to December 31, 1981

	Schools	Operators	Instructors
Licences Issued	101	99	353
Terminations	7	10	106
Suspensions	—	—	—
Reinstatements	—	—	—
Total Active Licenses as of December 31, 1981	94	89	247

Examinations Conducted January 1, 1981 to December 31, 1981

Written Examinations—	
Passed	104
Failed	68
Total	172
Practical Examinations—	
Passed	82
Failed	21
Total	103

Temporary Permits

Original Permits Issued	147
Temporary Instructors as of December 31, 1981	13

Bonding—December 31, 1981

		$	$
Bonded by Surety	52 ×	500 =	26,000
Security on Deposit (Parity Bond)	20 ×	500 =	10,000
	1 ×	1,000 =	1,000
Security on Deposit (Cdn. Gov't. Bond)	2 ×	500 =	1,000
Security on Deposit (Term Deposit)	7 ×	500 =	3,500
	2 ×	1,000 =	2,000
Security on Deposit (Cash)	21 ×	500 =	10,500
Total Surety and Security Value			54,000

January 1, 1981 to December 31, 1981 Revenue

		$	$
School Licences	101 ×	25 =	2,525
Operator's Licences	104 ×	10 =	1,040
Instructor's Licences	353 ×	5 =	1,765
Total			5,330

Inspections Conducted

Driver Training Schools	191

Driver Education Incentive Programe Certificates

Number of D.E.I.P. Certificates Received	3,098
Number of D.E.I.P. Certificates Approved	3,005
Number of D.E.I.P. Certificates Rejected	93

The Driver Education Incentive Program was discontinued December 31, 1980. However, applications for D.E.I.P. rebates were accepted until June 30, 1981.

THE CERTIFICATION PROGRAM

The Driver Certification Program is offered to persons, schools, firms and businesses involved in the transportation and trucking industry. The privilege of certifying drivers is granted to those companies who meet the standards of the program as set out by the Superintendent of Motor Vehicles.

There are 132 recognized authorities currently under the Certification Program in the Province.

During 1981, there were 57 liaison visits to recognized authorities conducted by supervisory examiners of the special programs staff.

Two recognized authorities were withdrawn and six new companies were accepted into the Program.

INDUSTRIAL ROADS

The Motor Vehicle Department assumed the responsibility of administering the *Highway (Industrial) Act* on July 1980. All drivers of unlicensed vehicles on private industrial roads are now licensed by the Superintendent of Motor Vehicles.

During 1981, the Superintendent issued the following Air Tickets and permits:

Original Air Tickets	104
Duplicate Air Tickets	27
Renewal Air Tickets	1,006
Temporary (60 day) Permits	43

As of December 31, 1981, there were 7,624 licensed Off Highway drivers.

REPORT OF DIRECTOR OF STANDARDS AND COMPLIANCE

P. Toogood, P.Eng.

The Director of Standards and Compliance directs the activities of the Motor Vehicle Inspection Division, the Commercial Transport Division and the Industrial Road Vehicle Program.

MOTOR VEHICLE INSPECTION DIVISION

In 1981 there were 590,921 vehicles inspected in the Victoria, Nanaimo, Vancouver, Richmond and Burnaby inspection stations. Out of this number 149,744 vehicles did not meet the standards and were rejected and, of these, 312 were in such poor condition that they were taken off the highway.

During this period, the inspection station staff also inspected 1,654 salvaged vehicles and those approved were issued a Certificate of Mechanical Condition. The average salvage inspection takes 1.4 hours.

There were 221 incident investigations conducted by Motor Vehicle inspectors in 1981.

The staff of the inspection stations also supervise and report on the 40 authorized inspection stations that have been established. There were 6,267 vehicles inspected and approved by the authorized stations.

From January 1, 1981 to December 31, 1981 there were 71 permits issued for flashing lamps; 26 permits were issued to allow the combined installation of sirens and flashing red lamps and nine permits were issued for the installation of theft alarms.

During 1981, there were 1,686 school bus permits issued which included 176 permits issued for new vehicles and renewals.

Critical item roadside inspections were conducted periodically during 1981 throughout the Province. The number of vehicles inspected and rates of rejection are as follows:

Roadside Check Period: January 1, 1981 to December 31, 1981.

Number of vehicles inspected	2,798
Number of vehicles approved	526 = 19%
Number of vehicles which require repair	2,135 = 76%
Number of vehicles removed from road	137 = 5%

DRIVERS' LICENCES CHECKED SHOWED:

(1) 9 lacked knowledge to adjust air brakes.
(2) 12 incorrect class of licence for equipment operated.

SUMMARY OF VEHICLE INSPECTIONS—1981

The following is the number of inspections completed at each station:

Inspection Station	Approved	Rejected	Percentage Rejected	Inspections Conducted
VICTORIA				
1981	108,898	31,186	22.3	140,084
1980	110,194	30,612	21.7	140,806
VANCOUVER				
1981	101,486	37,022	26.7	138,508
1980	116,399	45,844	28.3	162,243
RICHMOND				
1981	82,926	26,462	24.2	109,388
1980	87,409	31,232	26.3	118,641
BURNABY				
1981	119,880	44,718	27.2	164,598
1980	132,311	52,237	28.7	185,548
NANAIMO				
1981	27,987	10,356	27.0	38,343
1980	31,226	11,941	27.7	43,167

Notices requiring the owner to present his motor vehicle for inspection were mailed to 357,609, of whom 228,777 required a second notice.

During the inspection of motor vehicles, it was found that 149,744 did not meet the required safety standards and were rejected. The total number of defects found was 307,554 or 2.1 defects for each rejected vehicle.

Stations 001–005

Annual Motor Vehicle Inspection—Summary of Vehicle Inspection
January 1, 1981–December 31, 1981

	Inspected and Approved					Reinspected and Approved					Free Approved					Total Approved	Approved This Period
	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total		
Passenger	157,949	80,828	29,370	8,923	277,070	26,181	34,358	17,088	5,941	83,568	499	317	115	85	1,016	361,654	
Commercial	25,979	13,080	3,654	995	43,708	7,612	7,582	2,902	878	18,974	324	140	41	15	520	63,202	
Motorcycle	4,645	476	113	10	5,244	353	178	10	9	550	40				40	5,834	
Utility Trailer	478	248	62	35	823	143	147	71	25	386	1,653	1,550	1,106	528	4,837	6,046	
Motorhome	1,203	614	135	10	1,962	337	200	76	10	623	9	10			19	2,604	
Commercial Trailer	490	408	267	143	1,308	127	176	119	76	498	20	11			31	1,837	
Total	190,744	95,654	33,601	10,116	330,115	34,753	42,641	20,266	6,939	104,599	2,545	2,028	1,262	628	6,463	441,177	

	Inspected and Rejected					Reinspected and Rejected					Free Rejected					Total Rejected	Rejected This Period
	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total		
Passenger	31,990	44,736	22,797	8,814	108,337	1,160	3,045	1,866	812	6,883	163	128	164	69	524	115,744	
Commercial	10,371	10,056	4,058	1,279	25,764	589	1,273	528	203	2,593	197	154	24	54	429	28,786	
Motorcycle	715	261	23	18	1,017	9	19	32	11	71	20	11			31	1,119	
Utility Trailer	302	90	45	89	526	29	67	9		105	659	449	381	247	1,736	2,367	
Motorhome	307	357	79	19	762	24	37			61						823	
Commercial Trailer	209	326	203	94	832		28	20	4	52				21	21	905	
Total	43,894	55,826	27,205	10,313	137,238	1,811	4,469	2,455	1,030	9,765	1,039	742	569	391	2,741	149,744	
Per cent	18.7	36.9	44.7	50.5	29.4	5.0	9.5	10.8	12.9	8.5	29.0	26.8	31.1	38.4	29.8	25.3	
Presented for Inspection	234,638	151,480	60,806	20,429	467,353	36,564	47,110	22,721	7,969	114,364	3,584	2,770	1,831	1,019	9,204	590,921	

CAUSES OF REJECTION

All Stations

Code	Age 1	Age 2	Age 3	Age 4	Total
1. Motor vehicle licence	1,325	1,105	356	265	3,051
2. Number-plates	1,301	2,206	949	372	4,828
3. Plate-lamp	2,979	6,333	2,955	1,437	13,704
4. Tail-lamps	1,920	3,532	1,931	970	8,353
5. Stop-lamps	4,066	5,358	3,015	1,384	13,823
6. Turn-signals	2,750	5,525	3,737	1,882	13,894
7. Reflectors	749	873	471	413	2,506
8. Horn	1,023	1,743	1,142	646	4,554
9. Windshield-wipers	429	1,234	796	500	2,959
10. Left window-raiser	188	517	410	154	1,269
11. Doors, body hood	683	3,129	2,775	1,632	8,219
12. Bumper, mudflaps	573	990	777	527	2,867
13. Headlamps	9,064	13,007	9,391	3,865	35,327
14. Identification lamps	1,119	1,314	453	300	3,186
15. Spot-lamps	1,818	978	423	98	3,317
16. Fog-lamps	396	1,751	1,034	480	3,661
17. Auxiliary lamps	997	701	238	92	2,028
18. Wheel alignment	4,550	4,152	2,399	1,043	12,144
19. Steering mechanism	5,975	11,482	6,771	3,684	27,912
20. Tires, wheels	6,762	11,575	6,117	1,988	26,442
21. Fuel system	320	446	375	203	1,344
22. Exhaust, muffler	6,793	13,668	6,803	2,519	29,783
23. Service brakes	6,820	9,398	4,910	2,125	23,253
24. Pedal reserve	757	1,537	1,097	654	4,045
25. Brake connections	5,594	9,966	3,598	1,236	20,394
26. Air or vacuum	596	867	356	171	1,990
27. Vehicle noise	138	312	225	41	716
28. Parking brake	3,023	4,759	2,497	795	11,074
29. Visibility	3,723	4,802	2,330	804	11,659
30. Driver seat-belts	589	1,277	609	240	2,715
31. Miscellaneous	2,574	2,331	1,094	538	6,537
Grand Total	79,594	126,868	70,034	31,058	307,554

Vehicle Age Code: Age 1: 1977 and later, Age 2: 1972 to 1976, Age 3: 1967 to 1971, Age 4: 1966 and earlier.

AUTHORIZED INSPECTION STATIONS

There are now 40 authorized inspection stations in British Columbia.

In 1981 this division provided authorization to four companies enabling them to perform inspections.

Three of the 40 stations are able to inspect all types of vehicles and 37 are authorized to inspect trailers only.

The total number of vehicles inspected and approved by the authorized inspection stations from January 1, 1981 to December 31, 1981 was 6,267.

The statistics for these inspections are as follows:

Authorized Inspection
Stations 101–148

Annual
Motor Vehicle Inspection—Summary of Vehicle Inspection
January 1, 1981–December 31, 1981

	Inspected and Approved					Reinspected and Approved					Free Approved					Total Approved	Approved This Period
	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total		
Passenger	570	243	17	1	831											831	
Commercial	704	504	60	22	1,290											1,290	
Motorcycle	21	12			33											33	
Utility Trailer	3			3	6											6	
Motorhome Commercial Trailer	1,574	1,468	711	363	4,116											4,116	
Total	2,872	2,227	788	389	6,267											6,267	

	Inspected and Rejected					Reinspected and Rejected					Free Rejected					Total Rejected	Rejected This Period
	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total	Age 1	Age 2	Age 3	Age 4	Total		
Passenger																	
Commercial																	
Motorcycle																	
Utility Trailer																	
Motorhome Commercial Trailer																	
Total																	
Per cent Presented for Inspection																	

PERMITS FOR FLASHING RED AND AMBER LAMPS, SIRENS, THEFT ALARMS AND FLASHING HEADLAMPS

The Superintendent may, under provisions of the Motor Vehicle Act Regulations, issue permits to allow a vehicle to be equipped with a flashing lamp. The regulations specify that certain emergency vehicles, tow cars and pilot cars may be so equipped without obtaining permits. The permits are required for vehicles such as public utility vehicles which must stop on a highway to repair power or telephone lines. In each case, the permit is issued where a hazard exists and only with the approval of the local enforcement agency.

From January 1, 1981, to December 31, 1981, 53 permits for flashing amber lamps, and 18 permits for flashing red lamps were issued. In addition, 26 permits were issued to allow the combined installation of sirens and flashing red lamps on vehicles. These vehicles were usually ambulances or the personal vehicles of the chief of a volunteer fire department in a small community.

A total of nine permits was issued for the installation of theft alarms in vehicles.

SCHOOL BUSES

Control over the use and operation of school buses engaged in the transportation of students to and from schools in the Province is the responsibility of the Superintendent of Motor Vehicles. The control extends to the setting of minimum standards for the construction and maintenance of school buses and provides for their periodic inspection. This inspection is carried out on behalf of the Superintendent by senior Motor Vehicle inspectors from the five inspection stations. School buses in the Victoria area, Greater Vancouver area, and Greater Nanaimo area are either inspected at the inspection station in the area or by an inspector from the station.

From January 1, 1981, to December 31, 1981, the number of permits issued for vehicles to be used as school buses was 1,510 renewal permits and 176 permits for new vehicles for a total of 1,686 as compared to the period of January 1, 1980 to December 31, 1980 of 1,814. Of these permits issued, 32 were cancelled as the result of the sale and transfer of vehicle or of poor mechanical condition.

From January 1, 1981, to December 31, 1981, school buses were involved in 77 accidents of which 52 resulted in property damage only. Nine students and 25 persons other than students were injured in 25 injury accidents. There was no fatal accident involving a school bus during this period. Reported accidents involving property damage are lower for 1981 as only accidents for damage over $400 must be reported.

MOTOR CARRIER INSPECTION

In the inspection areas the Motor Vehicle Inspection Division inspects Motor Carrier licensed vehicles semi-annually. These vehicles are required to meet the standards of the Motor Carrier Act Regulations in order to transport passengers.

COMMERCIAL TRANSPORT DIVISION

This Division operates 40 permanent weigh scales throughout the Province, located at strategic points along the main highway system. Thirty-six of the scales are manned on a regular basis and certain border scales are operated on a 24-hour, seven-day-a-week basis.

The Division also has 19 portable patrols to monitor commercial vehicles in areas where there are no permanent weigh scales. Portable patrols also monitor logging trucks through weight data compiled and recorded by Ministry of Forests personnel. During 1981 approximately 477,000 loads were monitored through this procedure.

In addition to monitoring and checking commercial vehicles, weighmasters issue various types of permits, such as temporary operation, non-resident, motive-fuel use, highway crossing, restricted route, overweight and oversize.

They are also required to enforce the various statutes pertaining to the operation of commercial vehicles and are empowered to lay charges under the *Commercial Transport Act, Motor Carrier Act, Motor Vehicle Act, Highway Act* and the *Motive Fuel Use Tax Act*.

In the fall of 1981, Cabinet passed the new Load Security Regulations (Division 35 of the Regulations made pursuant to the *Motor Vehicle Act*). The Commercial Transport Division is responsible for enforcing the regulation to improve highway safety.

Construction of two new weigh scale facilities on Highway 19 near Parksville was started in 1981 with completion scheduled for early 1982. These new facilities will also improve highway safety as they are on opposite sides of the road. In order to keep staff requirements down, the southbound weigh scale was designed to accommodate northbound traffic as well. During low traffic hours all commercial vehicles will be monitored by the southbound weigh scale only and the northbound facility will be closed.

The Port Mann westbound weigh scale site underwent a major change to again improve highway safety. Both the ingress and egress lanes were extended a considerable distance and a large holding area was developed to relieve congestion within the weigh scale site.

Statistics for the Division for the year 1981 are as follows:

Commercial vehicles checked (excluding logging trucks)	2,494,201
Logging trucks checked through Forestry data (1981 calendar year)	467,804
Prosecutions entered	15,253
Violation notices (warnings) issued	6,953

PERMITS ISSUED

Term, short term and single trip (oversize and/or overweight)	69,934
Non-resident	57,979
Temporary Operation	32,303
Motive-fuel	21,555
Restricted Route	5,298
Highway Crossing	2,132
Special Temporary	648
I.C.B.C. (Non-resident and temporary operation)	45,232
C.A.V.R.	153
Total Permits Issued	233,399

REVENUE COLLECTED, 1981—(Approximate)

	$
Oversize and Overweight Permits	1,649,604
Non-resident Permits	1,589,737
Temporary Operation Permits	113,622
Restricted Route Permits	149,540
Highway Crossing Permits	47,288
Special Temporary Permits	2,192
Supplementary Fees	20,218
Motive-fuel Permits	528,536
I.C.B.C. Insurance	487,640
C.A.V.R.	459
Total Revenue	4,588,837

INDUSTRIAL ROAD VEHICLE PROGRAM

The Motor Vehicle Department completed the review of administrative responsibilities for provisions of the *Highway (Industrial) Act* which pertain to vehicle maintenance, equipment standards, operator training, driver licensing practices and accident investigations. Specific programs were also developed in these areas for implementation during 1982.

While the administrative procedures were being developed, the existing programs continued to function:

Number of field lectures	19
Number of office lectures	9
Field lectures attendance	419
Office lectures attendance	153

STATISTICS

Industrial vehicles inspected	445
Field and office air brake lectures attendance	286
Safety lectures attendance	194
Industrial vehicle driver exams processed	104
new applications	104
renewals	1,006
Industrial road accidents investigated	21
New vehicle applications reviewed and processed	329

REPORT OF THE DIRECTOR OF ADMINISTRATION AND SAFETY

J. F. PHILLIPS

The Director of Administration and Safety directs the Administration and Safety Branch which encompasses a general administrative responsibility with the functions of safety and the transportation of dangerous goods.

Road user safety programs are correlated through the Administration and Safety Branch. The support and direction of these programs is directed to highway safety concerns throughout British Columbia. In the past years, the program to have the most notable impact on the public safety has been the mandatory seatbelt legislation. In the year ending December 31, 1981 there were 18,135 seatbelt convictions. These convictions were in various areas of the Province and indicate the cooperation received from the law enforcement agencies. The Motor Vehicle Department believes that the seatbelt legislation has contributed noticeably to the decrease in the severity of accidents.

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